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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2005-

COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) finds that:

- 1. The Central Valley Region has more than seven million acres of cropland under irrigation and thousands of individuals and operations generating wastewater that fall into the category of "discharges from irrigated lands," as defined in Attachment A of Order No. R5-2005-____ (Order).
- 2. The Central Valley Region has thousands of miles of surface waters that are, or may be, affected by discharges of waste from irrigated lands. These discharges may adversely affect the quality of the "waters of the State," as defined in Attachment A of this Order.
- 3. Irrigated lands are lands where water is applied to produce crops including, but not limited to, land planted to row, vineyard, pasture, field and tree crops as well as commercial nurseries, nursery stock production, managed wetlands, rice production, and greenhouse operations with permeable floors that do not currently discharge under waste discharge requirements (WDRs) or Municipal Separate Storm Sewer System or other National Pollutant Discharge Elimination System (NPDES) permits.
- 4. Regional water quality data from the Surface Water Ambient Monitoring Program, the Stormwater Monitoring Program, NPDES Receiving Water Monitoring Reports, and other monitoring programs identify waters of the State with water quality impairments that appear attributable to or influenced by agriculture in areas of irrigated lands.
- 5. Some water bodies within the Central Valley Region have been listed as impaired pursuant to Clean Water Act Section 303(d). The 303(d) list of impaired water bodies identifies agriculture as a potential source of constituents that impair beneficial uses of some waters within the Central Valley Region and threaten the quality of waters of the State.

LEGAL AND REGULATORY CONSIDERATIONS

6. California Water Code (Water Code) Section 13260(a) requires that any person discharging waste or proposing to discharge waste within any region that could

affect the quality of the waters of the State, other than into a community sewer system, shall file with the appropriate Regional Board a report of waste discharge (RWD) containing such information and data as may be required by the Central Valley Water Board, unless the Central Valley Water Board waives such requirement.

- 7. Whether an individual discharge of waste from irrigated lands may affect the quality of the waters of the State depends on the quantity of the discharge, quantity of the waste, the quality of the waste, the extent of treatment, soil characteristics, distance to surface water, depth to groundwater, crop type, management practices and other site-specific factors. These individual discharges may also have a cumulative effect on waters of the State. Waste discharges from some irrigated lands have impaired and will likely continue to impair the quality of the waters of the State within the Central Valley Region if not subject to regulation pursuant to the Porter-Cologne Water Quality Control Act (codified in Water Code Division 7).
- 8. Water Code Section 13263 requires the Central Valley Water Board to prescribe WDRs, or waive WDRs, for the discharge. The WDRs must implement relevant water quality control plans and the Water Code.
- 9. The Central Valley Water Board has a statutory obligation to prescribe WDRs except where the Central Valley Water Board waives WDRs pursuant to Water Code Section 13269.
- 10. Water Code Section 13269(a) provides that the Central Valley Water Board may waive the requirements to submit a RWD and to obtain WDRs for a specific discharge or specific type of discharge, if the Central Valley Water Board determines that the waiver is consistent with any applicable water quality control plan and such waiver is in the public interest. Water Code Section 13269 further provides that any such waiver of WDRs shall be conditional, may not exceed five years in duration, and may be terminated at any time by the Central Valley Water Board.
- 11. As authorized by Water Code Section 13269, this Order adopts the *Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands* (Coalition Group Conditional Waiver). All owners and/or operators of irrigated lands that seek coverage under a Conditional Waiver are referred to as Dischargers, as defined in Attachment A of this Order. Some Dischargers will seek coverage under the Individual Discharger Conditional Waiver, and some Dischargers will seek coverage under the Coalition Group Conditional Waiver by joining a Coalition Group.
- 12. For the purposes of the Coalition Group Conditional Waiver, Water Districts, as defined in Attachment A, may join a Coalition Group for coverage under the Water Code for their discharges from operation spills, discharges resulting from facility

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maintenance activities, and discharges from drainage and storm water facilities contain tailwater and/or stormwater from irrigated lands.

- 13. Attachment A to this Order identifies regulatory requirements contained in the Central Valley Water Board's Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition and the Water Quality Control Plan for the Tulare Lake Basin, Second Edition (Basin Plans) that apply to the discharge of waste from irrigated lands. Attachment A also provides definitions of terms for purposes of this Order and the Coalition Group Conditional Waiver and a list of receiving water limitations. The Coalition Group Conditional Waiver is Attachment B.
- 14. With this Order, the Central Valley Water Board adopts the Coalition Group Conditional Waiver. The Coalition Group Conditional Waiver is for owners and/or operators of irrigated lands that have knowingly elected to join a Coalition Group approved by the Central Valley Water Board and formed on their behalf to comply with the Water Code and the Central Valley Water Board's plans and policies.
- 15. The Conditional Waiver requires the Coalition Groups and Dischargers to prepare and implement technical reports to monitor surface water; evaluate, monitor and implement management practices that result in attainment of receiving water limitations based on water quality objectives; and, if directed by the Central Valley Water Board, implement additional measures to protect the quality of waters of the State within the Central Valley Region.
- 16. Water Code Section 13269(a)(2) and (3) state:
 - (2) The conditions of the waiver shall include, but need not be limited to, the performance of individual, group, or watershed-based monitoring, except as provided in paragraph (3). Monitoring requirements shall be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. In establishing monitoring requirements, the regional board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based, compliance, and effectiveness monitoring efforts; the size of the project area; and other relevant factors. Monitoring results shall be made available to the public.
 - (3) The state board or a regional board may waive the monitoring requirements described in this subdivision for discharges that it determines do not pose a significant threat to water quality.

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TENTATIVE ORDER NO. R5-2005-____ COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

- 17. This Order requires the implementation of monitoring and reporting programs as set forth in Monitoring and Reporting Program Order No. R5-2005-_____ for Coalition Groups that are intended to support the development and implementation of the Coalition Group Conditional Waiver, to verify the adequacy and effectiveness of the Coalition Group Conditional Waiver's conditions, and to evaluate each Coalition Group's compliance with the terms and conditions of the Coalition Group Conditional Waiver.
- 18. Water Code Section 13267(b)(1) states: In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.
- 19. Technical reports are necessary to evaluate each Coalition Group's compliance with the terms and conditions of the Coalition Group Conditional Waiver and to assure protection of waters of the State.
- 20. Water Code Section 13269(a)(4)(A) authorizes the Central Valley Water Board to include as a condition of a conditional waiver the payment of an annual fee established by the State Water Resources Control Board (State Water Board). On 16 June 2005, the State Water Board adopted Order No. 2005-0049 Adopting Emergency Regulation Revisions to the Fee Schedules Contained in Title 23, Division 3, Chapter 9, Article 1, Section 2200.3 of the CCR, approving a fee schedule for agricultural waivers. This Order requires dischargers to pay an annual fee in compliance with the State Water Board fee regulations.
- 21. The Basin Plans designate beneficial uses, establish water quality objectives, contain programs of implementation needed to achieve water quality objectives, and reference the plans and policies adopted by the State Water Board. The water quality objectives are developed to protect the beneficial uses of waters of the State. Conditions contained in this Order implement these water quality objectives. Compliance with water quality objectives will protect the beneficial uses listed in the Finding below.

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- 22. Pursuant to the Basin Plans and State Water Board plans and policies, including State Water Board Resolution No. 88-63, and consistent with the federal Clean Water Act, the existing and potential beneficial uses of waters in the Central Valley Region include:
 - a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Service Supply
 - d. Hydropower Generation
 - e. Water Contact Recreation
 - f. Non-Contact Water Recreation
 - g. Warm Freshwater Habitat
 - h. Cold Freshwater Habitat
 - i. Migration of Aquatic Organisms
 - j. Spawning, Reproduction and Development
 - k. Wildlife Habitat
 - 1. Estuarine Habitat
 - m. Preservation of Biological Habitats of Special Significance
 - n. Shellfish Harvesting
 - o. Navigation
 - p. Rare, Threatened, and Endangered Species
 - q. Freshwater Replenishment
 - r. Groundwater Recharge
- 23. In May 2004, the State Water Board adopted the *Non Point Source (NPS) Implementation and Enforcement Policy* (NPS Policy). The purpose of the NPS
 Policy is to improve the State's ability to effectively manage NPS pollution and
 conform to the requirements of the Federal Clean Water Act and the Federal
 Coastal Zone Act Reauthorization Amendments of 1990. The NPS Policy provides
 a bridge between the State Water Board's January 2000 *NPS Program Plan* and its
 2002 *Water Quality Enforcement Policy*. NPS Policy requires, among other key
 elements, that an NPS control implementation program's ultimate purpose shall be
 explicitly stated, and that the implementation program must, at a minimum, address
 NPS pollution in a manner that achieves and maintains water quality objectives and
 beneficial uses, including any applicable antidegradation requirements. The
 Conditional Waiver is consistent with the NPS Policy.
- 24. State Water Board Resolution No. 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters in California (Resolution No. 68-16) requires Regional Water Boards, in regulating the discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Board's policies (e.g., quality that exceeds water quality objectives). Resolution No. 68-16 also states, in part:

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Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in best practicable treatment and control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

This Order and Attachments are consistent with Resolution No. 68-16. The Order requires persons who obtain coverage under the Coalition Group Conditional Waiver to comply with applicable water quality objectives, protect beneficial uses, and prevent nuisance by implementing monitoring and reporting programs, evaluating the effectiveness of management practices, and where water quality exceeds water quality objectives, by identifying and implementing additional management practices to comply with water quality objectives. The Coalition Group Conditional Waiver requires management practices to be implemented to achieve receiving water limitations that are based on water quality objectives in the Basin Plans (i.e., to prevent pollution and nuisance). These conditions are enforceable and the Coalition Group Conditional Waiver may be terminated at any time.

- 25. The Coalition Group Conditional Waiver sets forth a time schedule to achieve compliance with water quality objectives and protect beneficial uses. The Coalition Group Conditional Waiver establishes an iterative process that requires the dischargers to evaluate and then implement and/or improve management practices where it is determined that discharges from irrigated lands have caused or contributed to exceedances of applicable receiving water limitations. Management practices shall be evaluated to assure that they constitute the best practicable treatment or control of the discharges of waste to assure that pollution or nuisance will not occur and that the highest water quality is achieved. Changes in water quality that may occur as a result of the Coalition Group Conditional Waiver will be to improve, over time, the quality of the waters, not to cause further degradation. Thus, any change in water quality will be consistent with maximum benefit to the people of the State and will not unreasonably affect beneficial uses.
- 26. The United States Environmental Protection Agency adopted the National Toxics Rule (NTR) on 5 February 1993 and the California Toxics Rule (CTR) on 18 May 2000, which was modified on 13 February 2001. The NTR and CTR contain water quality criteria which, when combined with beneficial use designations in the Basin Plans, constitute enforceable water quality standards for priority toxic pollutants in California surface waters. In March 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Plan or SIP), which contains guidance on implementation of the NTR and the CTR. The SIP, which was amended on 12 August 2005, states that

implementation of the NTR and the CTR for agricultural nonpoint sources of pollution shall be consistent with the State's NPS Program Plan.

RATIONALE FOR COALTION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

- 27. In 1982, the Central Valley Water Board adopted Resolution No. 82-036 that conditionally waived WDRs for 23 categories of discharges, including irrigation return water and storm water runoff (1982 Waiver). Pursuant to Water Code Section 13269, these waivers terminated on 1 January 2003. On 5 December 2002, prior to the termination of the 1982 Waiver, the Central Valley Water Board adopted Resolution No. R5-2002-0201 establishing a new Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Within the Central Valley Region (2002 Conditional Waiver). On 11 July 2003, the Central Valley Water Board adopted Resolution No. R5-2003-0105 replacing the 2002 Conditional Waiver and establishing a new Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Within the Central Valley Region (2003 Conditional Waiver).
- 28. The Central Valley Water Board has reviewed the 2003 Conditional Waiver, adopted on 11 July 2003, and has determined that additional conditions are required to protect water quality.
- 29. The purpose of the Coalition Group Conditional Waiver is to provide an interim program until a long-term water quality regulatory program can be developed for Dischargers covered by this Order.
- 30. The Coalition Group Conditional Waiver sets forth conditions that will require Coalition Groups who enroll in the Conditional Waiver to conduct activities required by monitoring and reporting programs to determine effects on water quality and to implement and evaluate management practices implemented by growers that will result in achieving compliance with receiving water limitations in the waters of the State, develop and maintain on-site Farm Water Quality Plans and to conduct activities in a manner to prevent nuisance.
- 31. This Order conditionally waives the requirement to file RWDs and to obtain WDRs for discharges from irrigated lands, which includes surface discharges (also known as tailwater), operational spills, subsurface drainage generated by irrigating crop land or by installing drainage systems to lower the water table below irrigated lands (tile drains), and storm water runoff flowing from irrigated lands.
- 32. At this time, it is appropriate to adopt a waiver of RWDs and WDRs for this category of discharges because: 1) the discharges have the same or similar waste from the same or similar operations and use the same or similar treatment methods

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and management practices (i.e., source control, reduced chemical use, holding times, cover crops, etc.); 2) the Central Valley Water Board has limited facility-specific information and limited water quality data on facility-specific discharges; and 3) during the past three years, the Coalition Groups and agencies have been collecting water quality and management practice data in the region, and additional assessment information continues to be collected.

- 33. In addition, it is appropriate to regulate discharges of waste from irrigated lands under a Conditional Waiver rather than individual WDRs in order to simplify and streamline the regulatory process. During this process, additional activity and water quality information will be collected during the term of the Order and Coalition Group Conditional Waiver. An Environmental Impact Report (EIR) is being prepared pursuant to the California Environmental Quality Act (CEQA) to assess alternatives for a long-term regulatory program to ensure the protection of water quality caused by discharges of waste from irrigated lands.
- 34. It is not appropriate at this time to adopt individual WDRs to regulate discharges of waste from irrigated lands because there are estimated to be more than 50,000 individual owners and/or operators of irrigated lands (Dischargers) who discharge waste from irrigated lands and it is neither feasible nor practicable due to limitations of Central Valley Water Board resources to adopt individual WDRs within a reasonable time. The Central Valley Water Board supports the approach of allowing Dischargers to be represented by Coalition Groups in that it can provide a more efficient means to comply with many of the conditions contained in the Coalition Group Conditional Waiver.
- 35. It is not appropriate at this time to adopt individual WDRs because although there is information that discharges of waste from irrigated lands have impaired waters of the State, information is not generally available concerning the specific locations of impairments, specific causes, specific types of waste, and specific management practices that could mitigate impairments and improve and protect water quality. The conditions of the Coalition Group Conditional Waiver will result in the development of new and additional information on which to base the adoption of individual or general WDRs, if appropriate. The conditions of the Coalition Group Conditional Waiver require actions to protect and improve the quality of the waters of the State within the Central Valley Region. The conditions of the Coalition Group Conditional Waiver may be enforced in a manner similar to enforcement of WDRs. Coverage under the Coalition Group Conditional Waiver may be terminated at any time and the Executive Officer may require any person to submit a RWD and comply with the Water Code pursuant to individual or general WDRs.
- 36. The adoption of this Order and Coalition Group Conditional Waiver is in the public interest because (1) it was adopted in compliance with Water Code Sections 13260, 13263, and 13269 and other applicable law, (2) it includes conditions that are intended to reduce and prevent pollution and nuisance and protect the beneficial

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uses of the waters of the State, (3) it contains more specific and more stringent conditions for protection of water quality compared to either the 1982 Waiver or the 2003 Conditional Waiver, and contains conditions that are similar to the conditions of municipal stormwater NPDES permits, including evaluation and implementation of management practices to meet water quality objectives and a more specific monitoring and reporting program, (4) given the magnitude of the discharges and number of persons who discharge waste from irrigated lands, it provides for an efficient and effective use of limited Central Valley Water Board resources, and (5) it provides reasonable flexibility for the Dischargers who seek coverage under the Coalition Group Conditional Waiver by providing them with the option of complying with the Water Code through participation in Coalition Groups.

- 37. This Conditional Waiver is consistent with applicable Basin Plans because it requires compliance with applicable water quality objectives and receiving water limitations based on the water quality objectives and requires the prevention of nuisance. It requires implementation of monitoring and reporting programs to determine impacts to water quality and implementation of management practices to comply with applicable water quality objectives.
- 38. This action to waive the requirement to submit RWDs and to obtain WDRs for discharges from irrigated lands: (a) is conditional, (b) may be terminated at any time, (c) does not permit any illegal activity, and (d) does not preclude the need for permits that may be required by other State or local government agencies.
- 39. As part of the Central Valley Water Board's irrigated lands program strategy, the Central Valley Water Board has directed staff to prepare an EIR to develop a long-term water quality regulatory program to regulate discharges from irrigated lands. This program will enable the Central Valley Water Board to track progress in reducing the amount of waste discharged to waters of the State and measure the effectiveness of management practices implemented in order to meet the goal of compliance with water quality objectives. The preparation of an EIR to evaluate currently available and new information will identify and assess alternatives to achieve compliance with water quality objectives. The Central Valley Water Board has hired a contractor to prepare the EIR.
- 40. Resolution No. R5-2003-0105 implemented conditional waivers, which are provided for as the regulatory process under California's NPS Program Plan to meet the requirements of the Water Code. WDRs, including individual WDR Orders or General WDR Orders, may be adopted in the future for one or more types of discharges of waste from irrigated lands covered by the Coalition Group Conditional Waiver, if for example, it is determined that the Coalition Group Conditional Waiver is not effective at ensuring that water quality is protected.
- 41. As time and resources allow, the Central Valley Water Board will further evaluate discharges from irrigated lands to determine if the Coalition Group Conditional

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Waiver is adequate to improve and/or protect water quality and the beneficial uses of waters of the State. This evaluation will characterize these discharges, evaluate the effects of these discharges on waters of the State, and assess the effectiveness of management practices implemented to address impairments of waters of the State.

42. Where other State agencies have a regulatory role for activities or pollution addressed by the conditions of the Coalition Group Conditional Waiver, the Central Valley Water Board will work cooperatively with other State agencies in order to effectively regulate discharges from irrigated lands.

SCOPE AND DESCRIPTION OF COALITION GROUP CONDITIONAL WAIVER

- 43. This Order and its associated Coalition Group Conditional Waiver replaces and rescinds Resolution No. R5-2003-0105 and its associated Conditional Waivers.
- 44. The Coalition Group Conditional Waiver applies to discharges from irrigated lands to surface waters, which are waters of the State.
- 45. The Coalition Group Conditional Waiver is not intended to directly address the application of soil amendments or fertilizers to land, but to regulate the discharges of waste from irrigated lands to surface waters of the state, including discharges from stormwater.
- 46. Irrigated lands that receive liquid waste from sources such as dairy operations and food processors are not covered by the Coalition Group Conditional Waiver. Confined animal feeding operations and food processors are not eligible for coverage under the Coalition Group Conditional Waiver. Owners or operators of such confined animal facilities must obtain waste discharge requirements as directed by the Central Valley Water Board.
- 47. Irrigated lands used for gardens, vineyards, and small orchards that are used for the purpose of producing crops for personal consumption and are not sold are not covered by the Coalition Group Conditional Waiver.
- 48. Discharges of waste from irrigated lands that constitute agricultural return flows as defined in the Clean Water Act and regulations are exempt from regulation under the NPDES permit program. Discharges that are subject to the NPDES permit program under the Clean Water Act are not eligible for coverage under the Coalition Group Conditional Waiver.
- 49. The Coalition Group Conditional Waiver does not apply to discharges of waste that are regulated under another Conditional Waiver, individual WDRs or general WDRs. This Order and Coalition Group Conditional Waiver does not supercede the Central Valley Water Board's Basin plans and policies, including prohibitions

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(e.g., pesticides) and implementation plans (e.g., Total Maximum Daily Loads), or the State Water Board's plans and policies.

- 50. The Coalition Group Conditional Waiver provides an alternative regulatory option to WDRs. Dischargers may seek coverage under the Coalition Group Conditional Waiver. The Coalition Group Conditional Waiver includes receiving water limitations based upon existing water quality objectives contained in the Central Valley Water Board's Basin Plans, the NTR, and the CTR.
- 51. The formation, operation, and funding of Coalition Groups is the responsibility of the local entities and/or owners and/or operators of irrigated lands who join and are members of the Coalition Group.
- 52. Owners and/or operators of irrigated lands that discharge waste to waters of the state are required to comply with the Water Code. Such Dischargers are not required to join a Coalition Group. Owners and/or operators of irrigated lands may comply with the Water Code by joining a Coalition Group, by filing for coverage under the Individual Discharger Conditional Waiver or by filing a RWD to obtain individual or general WDRs.
- 53. The conditions of the Coalition Group Conditional Waiver require actions to achieve water quality objectives as follows: To satisfy the conditions of the Coalition Group Conditional Waiver, Coalition Groups must submit technical reports, conduct monitoring of surface waters, implement management practices, evaluate the effectiveness of management practices, refine management practices to improve their effectiveness where necessary, protect against pollution and nuisance, and protect the quality of waters of the State. Monitoring and reporting programs must be submitted to the Central Valley Water Board as required by Water Code Section 13269. Technical reports must be submitted to the Central Valley Water Board in accordance with Water Code Section 13267. The technical reports must document the results of water quality and management practice monitoring, describe actions taken to correct water quality impairments and nuisance conditions, and identify future actions necessary to improve and protect water quality. The management practices must be designed and implemented to achieve improvements in water quality, and show compliance with the conditions in the Coalition Group Conditional Waiver and with State and Regional Water Board plans and policies. For most operations, coalition Group members are required to developed and maintained on-site Farm Water Quality Plans. These plans shall identify, at a minimum, appropriate management practices for irrigation management, nutrient management, pesticide management, and erosion control that are protective of water quality. These management practices must be designed and implemented to achieve improvements in water quality and compliance with the conditions in the Conditional Waiver and the State and Central Valley Water Board plans and polices.

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TENTATIVE ORDER NO. R5-2005-____ COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

- 54. This Order, Coalition Group Conditional Waiver, and associated Monitoring and Reporting Program require water quality monitoring of discharges of waste from irrigated lands and surface water to assess the sources and effects of discharges of waste from irrigated lands and to verify the adequacy and effectiveness of the waiver's conditions.
- 55. A Coalition Group or an Individual Discharger may apply for coverage under the appropriate Conditional Waiver as specified in the appropriate Order. For this Order, a Coalition Group must submit a complete Notice of Intent (NOI) to comply with the conditions of the Coalition Group Conditional Waiver for approval by the Executive Officer. Upon submittal of a complete NOI, the Executive Officer may issue a Notice of Applicability (NOA), after which the Coalition Group will be considered approved and covered under the Coalition Group Conditional Waiver. Those Coalition Groups that submitted an NOI pursuant to Resolution No. R5-2003-0105 are not required to submit a new NOI unless so requested by the Executive Officer.
- 56. Starting **1 January 2007**, it is the responsibility of each member of a Coalition Group to enroll directly with the Central Valley Region according to the schedule contained in Attachment B, Section B.3, Technical Report. Enrollment can be completed by either electronically or in writing by submitting the appropriate documentation as set forth in Attachment B, Section B.4. All Coalition Group members shall be enrolled on or before **1 January 2008**,
- 57. Attached to this Order in **Attachment B** is the Coalition Group Conditional Waiver. The Coalition Group Conditional Waiver describes the terms and conditions that apply to Coalition Groups that represent Dischargers as a common group.
- 58. Pursuant to Water Code Section 13263(g), discharges of waste to waters of the State is a privilege, not a right, and adoption of this Order and Coalition Group Conditional Waiver, and the receipt of a NOA from the Executive Officer, does not create a vested right to continue the discharge.
- 59. This Order and its Coalition Group Conditional Waiver may be terminated at any time by the Central Valley Water Board and may be revised by the Central Valley Water Board after a public hearing. The Executive Officer may terminate the applicability of the Coalition Group Conditional Waiver with respect to a specific Discharger or Coalition Group upon notice to the Discharger or Coalition Group.
- 60. Interested persons were notified that the Central Valley Water Board will consider the adoption of Orders and Conditional Waivers, which conditionally waives WDRs for discharges from irrigated lands to surfaces waters, including irrigation wastewater and/or stormwater as described in this Order, and were provided an opportunity for a public hearing and an opportunity to submit written comments.

61. In a public hearing, all comments pertaining to this Order and Coalition Group Conditional Waiver were heard and considered.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

- 62. For purposes of adoption of this, the Central Valley Water Board is the lead agency pursuant to the CEQA (Public Resources Code Sections 21100 et seq.). On 5 December 2002, the Central Valley Water Board approved an Initial Study and Negative Declaration in Resolution No. R5-2002-0201. Resolution No. R5-2003-0105 modified the Conditional Waivers contained in Resolution No. R5-2002-0201, but did not substantially change the project considered in the Initial Study and Negative Declaration. Additional documents that clarify the basis for the Conditional Waivers are attached to Resolution No. R5-2003-0103, which approved the Initial Study and adopted a Negative Declaration with the clarifications.
- 63. Title 14 California Code of Regulations section 15162 (CEQA Guidelines) specifies that when the lead agency has adopted a negative declaration for a project, the agency is not required to prepare a subsequent environmental document unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, that, in summary, (1) substantial changes are proposed in the project that involve new significant environmental impacts; (2) substantial changes occur with respect to the circumstances of the project; or (3) new information of substantial importance which was not previously known shows that the project will have significant effects. None of the circumstances requiring preparation of subsequent environmental document have occurred.
- 64. Substantial changes have not occurred in the project or with respect to the circumstances of the project that would involve new significant environmental effects or a substantial increase in environmental effects. This Order will require additional actions to protect water quality as compared to Resolution No. R5-2003-0105. These action include direct enrollment with the Central Valley Regional Board, development and maintenance of Farm Water Quality Plans on-site for operations over 40 acres or as request by the Executive Officer, enhance report and communications with regard to water quality exceedances
- 65. Since the adoption of Resolution No. R5-2003-0105 and the Negative Declaration, new information has become available to the lead agency. Central Valley Water Board staff have compiled two years of water quality monitoring data from Central Valley Water Board sources, Coalition Groups, Water Districts and others within the Sacramento River, San Joaquin River, and Tulare Lake Basins. Water quality monitoring data from Coalition Groups and Individual Dischargers identified some exceedances of receiving water limitations. Coalition Groups have characterized many water bodies since 2003; most sample results showed no toxicity but some sample results showed toxicity. Some water quality parameters and chemicals were tested for the first time in these water bodies.

66. The new data and information were considered in this Order and its associated Coalition Group Conditional Waiver and Monitoring and Reporting Program. The new data and information confirm the effects of discharges of waste from irrigated lands on water quality that were previously discussed in the Initial Study and Negative Declaration. The new data and information do not show that there are any new effects of discharges of waste from irrigated on water quality that were not discussed in the Initial Study and Negative Declaration, nor do they show that the effects discussed would be more severe than discussed in the Initial Study and Negative Declaration. Therefore, no subsequent environmental document is required for this Order

IT IS HEREBY ORDERED that:

- 1. Resolution No. R5-2003-0105, dated 11 July 2003, Conditional Waivers of Waste Discharge Requirements for Discharges From Irrigated Lands Within the Central Valley Region, is hereby rescinded.
- 2. The goal of this Order and its Coalition Group Conditional Waiver is to improve and protect water quality by providing an interim program to regulate discharges of waste from irrigated lands that cause or contribute to conditions of pollution or nuisance as defined in Water Code Section 13050 or that cause or contribute to exceedances of receiving water limitations that implement any numeric or narrative water quality objectives, and by reducing discharges of waste.
- 3. Pursuant to Water Code Sections 13263, 13267, and 13269, Dischargers of waste described in this Order, who file for coverage under the Coalition Group Conditional Waiver, in order to meet the provisions contained in Water Code Division 7 and regulations and plans and policies adopted thereunder, shall comply with the terms and conditions contained in Coalition Group Conditional Waiver, **Attachment B.**
- 4. A Discharger may not discharge any waste not specifically regulated by the Coalition Group Conditional Waiver except in compliance with the Water Code.
- 5. The Central Valley Water Board waives the requirement to submit a RWD, and to obtain WDRs for discharges of waste from irrigated lands if the Discharger complies with the Coalition Group Conditional Waiver, attached to this Order and its associated Monitoring and Reporting Program.
- 6. Coalition Groups and the Individual Dischargers who are members of Coalition Groups shall take action to comply with the terms and conditions of the Coalition Group Conditional Waiver adopted by this Order and to improve and protect waters of the State.

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TENTATIVE ORDER NO. R5-2005-____ COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

- 7. For the reasons set forth in this Order, the Central Valley Water Board concludes that it is in the public interest to establish a Conditional Waiver for discharges from irrigated lands. Without appropriate management practices, discharges from irrigated lands could pose a significant threat to water quality. The conditions established in this Order will help ensure that discharges from irrigated lands do not impair beneficial uses of waters of the State within the Central Valley Region.
- 8. The Coalition Group Conditional Waiver shall not create a vested right, and all such discharges of waste shall be considered a privilege, as provided for in Water Code Section 13263.
- 9. Pursuant to Water Code Section 13269, this action waiving the issuance of WDRs for certain specific types of discharges: (a) is conditional, (b) may be terminated at any time, (c) does not permit any illegal activity, and (d) does not preclude the need for permits which may be required by other local or governmental agencies.
- 10. A waiver of WDRs for a type of discharge may be superceded by the adoption by the State Water Board or Central Valley Water Board of specific WDRs or general WDRs for this type of discharge.
- 11. The Central Valley Water Board may review this Order and the Coalition Group Conditional Waiver at any time and may modify or terminate the Coalition Group Conditional Waiver in its entirety, as is appropriate.
- 12. The Central Valley Water Board directs the Executive Officer to provide regular updates to the Central Valley Water Board regarding the effectiveness of the Coalition Group Conditional Waiver to regulate these types of discharges. These updates may include Executive Officer Reports, memoranda, staff reports, workshops, and agenda items.
- 13. This Order and Coalition Group Conditional Waiver shall become effective as of the date of this Order and expire **31 December 2010** unless rescinded, renewed or extended by the Central Valley Water Board.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full
true, and correct copy of an Order adopted by the California Regional Water Quality
Control Board, Central Valley Region, on

TENTATIVE ATTACHMENT A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2005-____

APPLICABLE WATER QUALITY CONTROL PLANS
AND DEFINITIONS
FOR
DISCHARGES FROM IRRIGATED LANDS TO SURFACE WATERS

COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

The following information is provided to ensure that Coalition Groups are aware of the existing water quality objectives contained in the California Regional Water Quality Control Board – Central Valley Region's (Central Valley Water Board) Water Quality Control Plans (Basin Plans). This information is not a complete list. More specific water quality objectives and implementation plans regarding discharges from agricultural lands are contained in these Basin Plans. This information will be used to assess and measure the effects of discharges of waste in irrigation water and stormwater from irrigated lands to surface waters under the terms and conditions of the Coalition Group Conditional Waiver and to develop an implementation program.

WATER QUALITY CONTROL PLANS

From the Basin Plans for the Central Valley Water Board:

The Sacramento River Basin and San Joaquin River Basin, Fourth Edition – 1998

The Tulare Lake Basin, Second Edition – 1995

For a complete list of the water quality objectives, refer to the Basin Plans, which are revised periodically.

OTHER RELEVANT PLANS AND POLICIES:

State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California

Non Point Source (NPS) Implementation and Enforcement Policy, May 2004

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RECEIVING WATER LIMITATIONS

The attached **Table 1** lists the receiving water limitations that correspond to the constituents, parameters and tests that are included as the minimum monitoring requirements in the Coalition Group Monitoring and Reporting Program.

DEFINITIONS

The following definitions apply to the Order, Coalition Group Conditional Waiver, and Monitoring and Reporting Program as related to discharges from irrigated lands as described in those documents.

- 1. Agricultural solid wastes Include wastes resulting from the production and processing of farm or agricultural products, including manures, prunings and crop residues wherever produced.
- 2. Coalition Group Any group of Dischargers and/or organizations that form to comply with the Conditional Waiver. Coalition Groups can be organized on a geographic basis or can be groups with other factors in common such as commodity groups.
- 3. Discharger The owner and/or operator of irrigated lands or a Water District, which accepts or receives discharges from irrigated lands, who discharges or threatens to discharge: irrigation return flows, tailwater, operational spills, drainage water, subsurface drainage generated by irrigating crop land or by installing drainage systems to lower the water table below irrigated lands (tile drains) and/or stormwater runoff flowing from irrigated lands to waters of the State.
- 4. Discharges from irrigated lands Include surface discharges (also known as irrigation return flows or tailwater), operational spills, drainage water discharges, subsurface discharges through drainage systems that lower the water table below irrigated lands (also known as tile drains), stormwater runoff flowing from irrigated lands, and stormwater runoff conveyed in channels or cannels resulting from the discharge from irrigated lands. For the purpose of this Coalition Group Conditional Waiver, stormwater discharges to surface waters resulting from any size storm can be covered by this Conditional Waiver.
- 5. Farm Water Quality Management Plan (FWQ Plan) a document that contains, at a minimum, identification of practices that are currently being or will be implemented to address irrigation management, pesticide management, nutrient management and erosion control to protect water quality. FWQ Plans will contain a schedule for implementation of practices. Lists of water quality protection practices are available from several sources, including the University of California FWQ Plan template available from the University of California and on-line at http://anrcatalogue.ucdavis.edu/merchant.ihtml?pid=5604&step=4.
- 6. Irrigated lands Lands where water is applied for the purpose of producing crops, including, but not limited to, land planted to row, vineyard, pasture, field and tree crops, commercial nurseries, nursery stock production, managed wetlands, rice production, and greenhouse operations with permeable floors that do not currently discharge under waste discharge requirements (WDRs),

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including Municipal Separate Storm Sewer System or other National Pollutant Discharge Elimination System permits are considered irrigated lands.

- 7. Irrigation return flow Surface and subsurface water which leaves the field following application of irrigation water.

- 8. Liquid waste Any waste materials which are not spadable.
- 9. Monitoring All types of monitoring undertaken in connection with determining water quality conditions and factors that may affect water quality conditions, including but not limited to, instream water quality monitoring undertaken in connection with agricultural activities, monitoring to identify short and long-term trends in water quality, active inspections of operations, and management practice implementation and effectiveness monitoring.
- 10. Operational spill Irrigation water that is diverted from a source such as a river, but is discharged without being delivered to or used on an individual field.
- 11. Receiving waters Surface waters that receive or have the potential to receive discharges from irrigated lands.
- 12. Requirements of applicable water quality control plans Water quality objectives, prohibitions, Total Maximum Daily Load Implementation Plans, or other requirements contained in water quality control plans adopted by the Central Valley Water Board and approved according to applicable law. **Attachment A** may be revised periodically.
- 13. Stormwater runoff The runoff of precipitation from irrigated lands to surface waters from any size storm event.
- 14. Subsurface drainage Water generated by installing drainage systems to lower the water table below irrigated lands. Subsurface drainage systems, deep open drainage ditches, or drainage wells can generate this drainage.
- 15. Tailwater The runoff of irrigation water from an irrigated field.
- 16. Waste As defined in California Water Code (Water Code) Section 13050. Includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers or whatever nature prior to, and for the purposes of disposal. Waste specifically regulated by the Coalition Group Conditional Waiver includes: earthen materials, such as soil, silt, sand, clay, and rock; inorganic materials, such as metals, salts, boron, selenium, potassium, nitrogen, etc.; and organic materials, such as pesticides that enter or threaten to enter waters of the State. Examples of waste not specifically regulated by the Coalition Group Conditional Waiver include hazardous and human wastes.

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- 17. Water District California law defines a water district as any district or other political subdivision, other than a city or county, a primary function of which is the irrigation, reclamation, or drainage of land or the diversion, storage, management, or distribution of water primarily for domestic, municipal, agricultural, industrial, recreation, fish and wildlife enhancement, flood control, or power production purposes. (Water Code Section 20200.) Such districts include, but are not limited to, irrigation districts, county water districts, California water districts, water storage districts, reclamation districts, county waterworks districts, drainage districts, water replenishment districts, levee districts, municipal water districts, water conservation districts, community services districts, water management districts, flood control districts, flood control and floodwater conservation districts, flood control and water conservation districts, water management agencies, and water agencies.
- 18. Waters of the State As defined in Water Code Section 13050. Any surface water or groundwater, including saline waters, within the boundaries of the State. The Order and Coalition Group Conditional Waiver regulate discharges from irrigated lands to surface waters.
- 19. All other terms shall have the same definitions as prescribed by the Porter-Cologne Water Quality Control Act (Water Code Division 7), unless specified otherwise.

Water Quality				
Constituent	Limit	Objective ^{1,2}	Reference	
Parameters				
Flow				
рH	6.5 - 8.5 units (a)	pН	Sacramento/San Joaquin Rivers Basin Plan	
рп	6.5 - 8.3 units (b)	pН	Tulare Lake Basin Plan	
Electrical Conductivity	variable (see charts at conclusion of table)	Salinity	Basin Plans - varies by water body	
	700 umhos/cm	Chemical Constituent	Water Quality for Agriculture (Ayers & Westcot)	
Dissolved Oxygen (minimum)	variable (see charts at conclusion of table)	Dissolved Oxygen	Basin Plans - varies by water body and time of year	
Temperature	variable (see charts at conclusion of table)	Temperature	Basin Plans - varies by water body an time of year	
Color	15 units	Chemical Constituent	California Secondary MCL	
Turbidity	variable increase (see charts at conclusion of table)	Turbidity	Basin Plans - increase varies based on natural turbidity	
Total Dissolved Solids	variable (see charts at conclusion of table)	Salinity	Basin Plans - varies by water body and time of year	
	500 ug/L		California Primary MCL	
	450 mg/L	Chemical Constituent	Water Quality for Agriculture (Ayers & Westcot)	
Fecal Coliform	200 MPN/100 ml	Bacteriological	Basin Plan Objective for Inland Surface Waters	
	100 MPN/100 ml	Bacteriological	Basin Plan Objective for Folsom Lake	
Total Organic Carbon				
Toxicity Test	1 .		In	
Algae Toxicity	non-toxic	Toxicity; Pesticides	Basin Plans	
Water Column Toxicity	non-toxic	Toxicity; Pesticides	Basin Plans	
Sediment Toxicity	non-toxic	Toxicity; Pesticides	Basin Plans	
Pesticides - Carbamat	es	<u> </u>	I	
Aldicarb	4.1 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Aldicarb on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Cyprinodon variegatus (Sheepshead minnow) is 41 ug/L.	
	7 ug/L	Toxicity	California State Notification Level - DHS	
Carbaryl	2.53 ug/L	Toxicity	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average (California Department of Fish and Game)	
	0.4 ug/L	Pesticide Prohibition	Sacramento/San Joaquin Basin Plan - Performance Goal	
Carbofuran	0.5 ug/L	Toxicity	California Dept of Fish & Game Interim Water Quality Criteria - Freshwater Aquatic Life Protection (Instantaneous Maximum)	
Methiocarb	0.5 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Methiocarb on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Pteronarcys californicus (Stonefly) is 5 ug/L.	

Water Quality				
Constituent	Limit	Objective ^{1,2}	Reference	
Pesticides - Carbamat	es (continued)	-		
Methomyl	0.52 ug/L	Toxicity	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average (California Department of Fish and Game)	
Oxamyl	22 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Oxamyl on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Gammarus italicus (Scud) is 220 ug/L.	
	50 ug/L	Chemical Constituent	California Primary MCL	
Pesticides - Organoch	lorines			
Total persistent organochlorine pesticides	non-detect using USEPA or standard methods	Pesticides	Sacramento/San Joaquin Basin Plan	
DDD	0.00083 ug/L	CTR	Human Health Protection, 30-Day Average - Sources of Drinking Water (water & fish consumption)	
	0.00084 ug/L	CTR	Human Health Protection, 30-Day Average - Other Waters (fish consumption only)	
DDE	0.00059 ug/L	CTR	Human Health Protection, 30-Day Average - Sources of Drinking Water (water & fish consumption)	
	0.00059 ug/L	CTR	Human Health Protection, 30-Day Average - Other Waters (fish consumption only)	
DDT	0.00059 ug/L	CTR	Human Health Protection, 30-Day Average - Sources of Drinking Water (water & fish consumption)	
	0.00059 ug/L	CTR	Human Health Protection, 30-Day Average - Other Waters (fish consumption only)	
Dicofol	5.3 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Toxicity Study for Dicofol on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Oncorhynchus slarki (Cutthroat trout) is 53 ug/L.	
Dieldrin	0.00014 ug/L	CTR	Human Health Protection, 30-Day Average - Sources of Drinking Water (water & fish consumption)	
Dielann	0.00014 ug/L	CTR	Human Health Protection, 30-Day Average - Other Waters (fish consumption only)	
Endrin	0.036 ug/L	CTR	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average	
Methoxychlor	0.03 ug/L	Toxicity	National Ambient Water Quality Criteria - Freshwater Aquatic Life Protection - instantaneous maximum	
Pesticides - Organoph	osphates			
Azinphos-methyl	0.01 ug/L	Toxicity	National Ambient Water Quality Criteria - Freshwater Aquatic Life Protection (Instantaneous)	
	0.004 ug/L	Chronic Criterion	1/10 of LC50 of most sensitive species per Basin Plan Policy	
Chlorpyrifos	0.015 ug/L ⁵	Chronic Criterion	Central Valley Regional Water Quality Control Board; Beaulaurier, et al, 2005 - Draft Basin Plan Amendment Staff Report for Diazinon and Chlorpyrifos in the Lower San Joaquin River.	
	0.006 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	1/10 of LC50 of most sensitive species per Basin Plan Policy	
	0.014 ug/L	Toxicity	California Dept of Fish and Game Water Quality Criteria - Freshwater Aquatic Life Protection (4-Day Average)	
		t .		

Water Quality						
Constituent	Limit	Objective ^{1,2}	Reference			
Pesticides - Organoph	Pesticides - Organophosphates (continued)					
	0.05 ug/L; 4-day average - not to be exceeded more than once every 3 years on average	Basin Plan Water Quality Objectives	Table III-2A of the Sacramento/San Joaquin Basin Plan. Applicable Water Bodies: Sacramento River from Shasta Dam to Colusa Basin Drain (13) and the Sacramento River from the Colusa Basin Drain to I Street Bridge (30). Feather River from Fish Barrier Dam to Sacramento River (40).			
Diazinon⁴	0.05 ug/L	Chronic Criterion	California Dept of Fish and Game Water Quality Criteria - Freshwater Aquatic Life Protection (4-Day Average)			
	0.1 0 ug/L ⁵	Chronic Criterion	Central Valley Regional Water Quality Control Board; Beaulaurier, et al, 2005 - Draft Basin Plan Amendment Staff Report for Diazinon and Chlorpyrifos in the Lower San Joaquin River.			
	0.003 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	1/10 of LC50 of most sensitive species per Basin Plan Policy			
Dichlorvos	0.002 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Toxicity Study for Dich;prvps on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Bellamya bengalensis (Snail) is 0.02 ug/L.			
	0.085 ug/L	Toxicity	Cal/EPA Cancer Potency Factor as a drinking water level			
Demeton	2.7 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Demeton on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Gammarus fasciatus (Scud) is 27.02 ug/L.			
	0.1 ug/L	Toxicity	National Ambient Water Quality Criteria - Freshwater Aquatic Life Protection - instantaneous maximum			
Dimethoate	0.2 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Toxicity Study for Dimethoate on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Cyclops strenuus (Cyclopoid copepod) is 2.0 ug/L.			
	1.0 ug/L	Toxicity	California State Action Level - DHS			
Disulfoton (Disyston)	0.05 ug/L	Toxicity	National Ambient Water Quality Criteria - Freshwater Aquatic Life Protection - instantaneous maximum			
	0.10 ug/L	Pesticide Prohibition	Sacramento/San Joaquin Basin Plan - Performance Goal			
Malathion	0.43 ug/L	Toxicity	California Dept of Fish & Game Water Quality Criteria - Freshwater Aquatic Life Protection (1-Hour Average)			
Methamidophos	0.00002 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Toxicity Study for Methamidophos on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Macrobrachium rosenbergii (Giant river prawn) is 0.0002 ug/L.			
	0.35 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*			
Methidathion	0.07 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Toxicity Study for Methidathion on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Americamysis bahia (Opossum shrimp) is 0.7 ug/L.			
	0.7 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*			

Constituent Pesticides - Organophos	Limit	Objective ^{1,2}	Reference
Pesticides - Organophos			1.0.0.0.00
	sphates (continu	ed)	
	0.13 ug/L	Pesticide Prohibition	Sacramento/San Joaquin Basin Plan - Performance Goal
Parathion-methyl	0.08 ug/L	Toxicity	California Dept of Fish & Game Interim Water Quality Criteria - Freshwater Aquatic Life Protection (Instantaneous Maximum)
Phorate	0.03 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Toxicity Study for Phorate on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Americamysis bahia (Opossum shrimp) s 0.3 ug/L.
	0.7 ug/L	Toxicity	National Academy of Sciences Health Advisory
Phosmet	0.2 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Phosmet on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Gammarus fasciatus (Scud) is 2.0 ug/L.
	140 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*
Pesticides - Pyrethroids	3		
Biphenthrin	0.0004 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	Sacramento River Watershed Program, Annual Monitoring Report, 2002-2003, July 2004, Table 22 Toxicity Threshold Values for Pyrethroid Pesticides lists Bifenthrin LC50 (96 hour) for crustacea as 0.004 ug/L.
	110 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*
Cyfluthrin	0.00024 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	Sacramento River Watershed Program, Annual Monitoring Report, 2002-2003, July 2004, Table 22 Toxicity Threshold Values for Pyrethroid Pesticides lists cyfluthrin LC50 (96 hour) for crustacea as 0.0024 ug/L.
	180 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*
Cypermethrin	0.00047 ug/L	Basin Plan Implementation ³	Sacramento River Watershed Program, Annual Monitoring Report, 2002-2003, July 2004, Table 22 Toxicity Threshold Values for Pyrethroid Pesticides lists cypermethrin LC50 (96 hour) for crustacea as 0.0047 ug/L.
	0.002 ug/L	Toxicity	California Dept of Fish & Game Interim Water Quality Criteria - Freshwater Aquatic Life Protection (1-Hour Average)
Esfenvalerate	0.007 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Esfenvalerate on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Oncorhynchus mykiss (Rainbow trout, donaldson trout) is 0.07 ug/L.
Lambda-Cyhalothrin	0.00041 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	Sacramento River Watershed Program, Annual Monitoring Report, 2002-2003, July 2004, Table 22 Toxicity Threshold Values for Pyrethroid Pesticides lists lambda-cyhalothrin LC50 (96 hour) for crustacea as 0.0041 ug/L.
	35 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*

Water Quality				
Constituent	Limit	Objective ^{1,2}	Reference	
Pesticides - Pyrethroid	ls (continued)			
Permethrin	0.0019 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	Sacramento River Watershed Program, Annual Monitoring Report, 2002-2003, July 2004, Table 22 Toxicity Threshold Values for Pyrethroid Pesticides lists permethrin LC50 (96 hour) for crustacea as 0.019 ug/L.	
	0.03 ug/L	Toxicity	California Dept of Fish & Game Interim Water Quality Criteria - Freshwater Aquatic Life Protection (1-Hour Average)	
Pesticides - Herbicides	3			
Atrazine	2.6 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Atrazine on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Selenastrum capricornutum (green algae) is 26.02 ug/L.	
	1.0 ug/L	Chemical Constituent	California Primary MCL	
Cyanazine	14.5 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Cyanazine on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Selenastrum capricornutum (green algae) is 145 ug/L.	
	1.0 ug/L	Toxicity	USEPA Health Advisory	
Diuron	16 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Diuron on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Gammarus fasciatus (Scud) is 160 ug/L.	
	14 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*	
Glyphosate	130 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Glyphosate on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Oncorhynchus mykiss (Rainbow trout, donaldson trout) is 1,300 ug/L.	
	700 mg/L	Chemical Constituent	California Primary MCL	
Linuron	180 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Linuron on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Ictalurus punctatus (Channel catfish) is 1,800 ug/L.	
	1.4 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*	
	10 ug/L	Pesticide Prohibition	Sacramento/San Joaquin Basin Plan - Performance Goal	
Molinate	13 ug/L	Toxicity	California Dept of Fish & Game Water Quality Criteria - Freshwater Aquatic Life Protection (Instantaneous Maximum)	

Water Quality				
Constituent	Limit	Objective ^{1,2}	Reference	
Pesticides - Herbicides	s (continued)			
Paraquat dichloride	50 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Paraquat dichloride on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Rana pipiens (Leopard frog) is 500 ug/L.	
	3.2 ug/L	Toxicity	USEPA IRIS Reference Dose as a drinking water level*	
Simazine	25 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Simazine on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Morone saxatilis (Striped bass) is 250 ug/L.	
	4.0 ug/L	Chemical Constituent	California Primary MCL	
Thiobencarb	11 ug/L	Sacramento/San Joaquin Basin Plan Implementation ³	PAN Pesticides Database - Chemical Toxicity Studies on Aquatic Organisms - Toxicity Studies for Thiobencarb on All Organism Groups - Toxicology studies from the primary scientific literature on aquatic organisms. The mean 96 hour LC50 toxic dose for Cyprinus carpio is 110 ug/L.	
Madala (a)	1.0 ug/L	Chemical Constituent	California Secondary MCL	
Metals (c)	0.004 ug/L	Toxicity	California Public Health Goal for Drinking Water	
Arsenic	10 ug/L	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1, Trace Element Water Quality Objective. Applicable Water Bodies - Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento (13,30); American River from Folsom Dam to the Sacramento River (51); Folsom Lake (50); and the Sacramento-San Joaquin Delta	
	700 ug/L		Water Quality for Agriculture (Ayers & Westcot)	
	2,000 ug/L (15 March through 15 September)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives		
	800 ug/L (monthly mean, 15 March through 15 September)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives		
Boron	2,600 ug/L (16 September through 14 March)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - San Joaquin River, mouth of the Merced River to Vernalis	
	1,000 ug/L (monthly mean, 16 September through 14 March)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	more and the contract of the c	
	1,300 ug/L [monthly mean, critical year (type of year is defined in Table IV-3)]	Sacramento/San Joaquin Basin Plan - Water Quality Objectives		

Water Quality						
Constituent	Limit	Objective ^{1,2}	Reference			
Metals (c) - continued						
Cadmium	0.07 ug/L variable (see charts at conclusion of table)	Toxicity Sacramento/San Joaquin Basin Plan - Water Quality Objectives	California Public Health Goal for Drinking Water Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - Sacramento River and its tributaries above State Highway 32 bridge at Hamilton City - Varies with water hardness			
	variable (see charts at conclusion of table)	CTR	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average - Varies with water hardness			
Copper	variable (see charts at conclusion of table)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - Sacramento River and its tributaries above State Highway 32 bridge at Hamilton City - varies with water hardness			
обрро.	10 ug/L	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1, Trace Element Water Quality Objective. Applicable Water Bodies - Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento (13,30); American River from Folsom Dam to the Sacramento River (51); Folsom Lake (50); and the Sacramento-San Joaquin Delta. It does not apply to Sacramento River above State Highway 32 bridge at Hamilton City.			
Lead	variable below hardness of 69 mg/L as CaCO3 (see charts at conclusion of table)	CTR	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average - varies with water hardness			
	2 ug/L at or above hardness of 69 mg/L as CaCO3	Toxicity	California Public Health Goal for Drinking Water			
Nickel	variable below hardness of 215 mg/L as CaCO3 (see charts at conclusion of table)	CTR	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average - varies with water hardness			
	100 ug/L at or above hardness of 215 mg/L as CaCO3	Chemical Constituent	California Primary MCL			
	5.0 ug/L	NTR	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average			
Selenium	5 ug/L (4-day average)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - San Joaquin River, mouth of the Merced River to Vernalis			
	5 ug/L (4-day average)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of the Merced River			
	2 ug/L (monthly mean)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - Salt Slough and constructed and re-constructed water supply channels in the Grassland watershed listed in Appendix 40			

		Water Quality	
Constituent	Limit	Objective ^{1,2}	Reference
Metals (c) - continued	· · · · · · · · · · · · · · · · · · ·		
	variable (see charts at conclusion of table)	CTR	Freshwater Aquatic Life Protection - Continuous Concentration, 4-Day Average - varies with water hardness
Zinc	100 ug/L	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1, Trace Element Water Quality Objective. Applicable Water Bodies - Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento (13,30); American River from Folsom Dam to the Sacramento River (51); Folsom Lake (50); and the Sacramento-San Joaquin Delta. It does not apply to Sacramento River above State Highway 32 bridge at Hamilton City.
	variable (see charts at conclusion of table)	Sacramento/San Joaquin Basin Plan - Water Quality Objectives	Table III-1: Trace Element Water Quality Objective. Applicable Water Bodies - Sacramento River and its tributaries above State Highway 32 bridge at Hamilton City - varies with water hardness
Nutrients			
Total Kjeldahl Nitrogen			
Nitrate as NO3	45,000 ug/L as NO3	Chemical Constituent	California Primary MCL
Nitrite as Nitrogen	1,000 ug/L as N	Chemical Constituent	California Primary MCL
	1,500 ug/L	Taste and Odor	Taste and Odor Threshold (J.E. Moore and E. Hautala, Odor as an Aid to Chemical Safety: Odor Thresholds Compared with Threshold Limit Values and Volatilities for 214 Industrial Chemicals in Air and Water Dilution, Journal of Applied Toxicology, Vol. 3, No. 6 (1983).
Ammonia	variable (see charts at conclusion of table)	Toxicity	National Ambient Water Quality Criteria - Freshwater Aquatic Life Protection, 30-day Average - varies with pH, temperature and presence or absence of early life stages
	25 ug/L	Basin Plan Water Quality Objectives	The Tulare Lake Basin Plan states, "Waters shall not contain un-ionized ammonia in amounts which adversely affect beneficial uses. In no case shall the discharge of wastes cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N) in receiving waters."
Hardness			
Total Phosphorous	50 ug/L (d)		
Orthophsophate	50 ug/L (d)		

Footnotes and Abbreviations

See Next Page

Footnotes

- (a) No change from normal over 0.5 units
- (b) No change from normal over 0.3 units
- (c) Use total metal results for toxicity criteria and dissolved metal results for aquatic criteria
- (d) The value listed is not a limit that represents implementation of a Basin Plan narrative objective. The limit listed is based on a value achievable by laboratories that allows Water Board staff to evaluate nutrient levels in agricultural return waters as it could impair the quality of waters of the state through eutrophication.
- * Assumes 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution from drinking water. An additional uncertainty factor of 10 is used for Class C carcinogens.
- ^ Below hardness of 80 mg/L as CaCO3, 4-day average limit is variable depending on hardness of water. At or above hardness of 80 mg/L, limit is 2 ug/L.

Abbreviations

USEPA: United States Environmental Protection Agency mg/L: milligrams per liter (parts per million)
DHS: Department of Health Services ug/L: micrograms per liter (parts per billion)

IRIS: Integrated Risk Information System CTR: California Toxics Rule

MCL: Maximum Contaminant Level umhos: Microhms NTU: Nephelometric turbidity unit ml: milliliters

PHG: California Public Health Goal in Drinking Water - Office of Environmental Health Hazard Assessment

¹ Water Quality Control Plans for the Sacramento River, San Joaquin River and Tulare Lake Basins

² When water quality based limit is lower than the maximum practical quantitation limit (PQL) for the constituent, the PQL becomes the limit.

³ Section IV - Pesticide Discharges from Nonpoint Sources, page IV-35.00 of the Sacramento/San Joaquin Basin Plan states, Where valid testing has developed 96 hour LC50 values for aquatic organisms...the Board will consider one tenth of this value for the most sensitive species tested as the upper limit (daily maximum) for the protection of aquatic life.

⁴ The Sacramento River/San Joaquin River Basin Plan includes additional requirements for Diazinon that become effective in 2008.

⁵ The chlorpyrifos and diazinon limitations come from the Draft Basin Plan Amendment Staff Report, which are not effective until the Staff Report is adopted and fully approved.

CHARTS AND TABLES FROM THE SACRAMENTO RIVER BASIN AND SAN JOAQUIN RIVER BASIN

TABLE III-1 TRACE ELEMENT WATER QUALITY OBJECTIVES

CONSTITUENT	MAXIMUM CONCENTRATION (mg/l) a	APPLICABLE WATER BODIES
Arsenic	0.01	Sacramento River from Keswick Dam to the I Street Bridge at City of Sacramento (13, 30); American River from Folsom Dam to the Sacramento River (51); Folsom Lake (50); and the Sacramento-San Joaquin Delta.
Barium	0.1	As noted above for Arsenic.
Boron	2.0 (15 March through 15 September) 0.8 (monthly mean, 15 March through 15 September)	San Joaquin River, mouth of the Merced River to Vernalis
	2.6 (16 September through 14 March) 1.0 (monthly mean, 16 September through 14 March)	
	1.3 (monthly mean, critical year ^b)	
Cadmium	0.00022 ^c	Sacramento River and its tributaries above State Hwy 32 bridge at Hamilton City
Copper	0.0056 ^c	As noted above for Cadmium.
	_{0.01} d	As noted above for Arsenic. d
Cyanide	0.01	As noted above for Arsenic.
Iron	0.3	As noted above for Arsenic.
Manganese	0.05	As noted above for Arsenic.
Molybdenum	0.015 0.010 (monthly mean)	San Joaquin River, mouth of the Merced River to Vernalis
	0.050 0.019 (monthly mean)	Salt Slough, Mud Slough (north), San Joaquin River from Sack Dam to the mouth of Merced River
Selenium	0.012 0.005 (4-day average)	San Joaquin River, mouth of the Merced River to Vernalis
	0.020 0.005 (4-day average)	Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
	0.020 0.002 (monthly mean)	Salt Slough and constructed and re-constructed water supply channels in the Grassland watershed listed in Appendix 40.
Silver	0.01	As noted above for Arsenic.
Zinc	$0.1\mathrm{d}$	As noted above for Arsenic. d
	0.016 ^c	As noted above for Cadmium.

footnotes on following page

- a Metal objectives in this table are dissolved concentrations. Selenium, molybdenum, and boron objectives are total concentrations.
 - b See Table IV-3.
 - c The effects of these concentrations were measured by exposing test organisms to dissolved aqueous solutions of 40 mg/l hardness that had been filtered through a 0.45 micron membrane filter. Where deviations from 40 mg/l of water hardness occur, the objectives, in mg/l, shall be determined using the following formulas:

$$Cu = e \; (0.905) \; (ln \; hardness) \; \text{--} \; 1.612 \; _{X} \; 10\text{--}3$$

$$Zn = e \; (0.830) \; (ln \; hardness) \; \text{--} \; 0.289 \; _{X} \; 10\text{--}3$$

$$Cd = e \; (1.160) \; (ln \; hardness) \; \text{--} \; 5.777 \; _{X} \; 10\text{--}3$$

d Does not apply to Sacramento River above State Hwy. 32 bridge at Hamilton City. See relevant objectives (*) above.

TABLE III-2 SPECIFIC DISSOLVED OXYGEN WATER QUALITY OBJECTIVES

<u>AMOUNT</u>	TIME	PLACE
9.0 mg/l *	1 June to 31 August	Sacramento River from Keswick Dam to Hamilton City (13)
8.0 mg/l	1 September to 31 May	Feather River from Fish Barrier Dam at Oroville to Honcut Creek (40)
8.0 mg/l	all year	Merced River from Cressy to New Exchequer Dam (78)
8.0 mg/l	15 October to 15 June	Tuolumne River from Waterford to La Grange (86)

^{*} When natural conditions lower dissolved oxygen below this level, the concentrations shall be maintained at or above 95 percent of saturation.

TABLE III-3 ELECTRICAL CONDUCTIVITY AND TOTAL DISSOLVED SOLIDS

PARAMETER W. Electrical Conductivity SI

(at 25°C)

Total Dissolved Solids

<u>WATER QUALITY OBJECTIVES</u> Shall not exceed 230 micromhos/cm (50 percentile) or

235 micromhos/cm (90 percentile) at Knights Landing above Colusa Basin Drain; or 240 micromhos/cm (50 percentile) or 340 micromhos/cm (90 percentile) at I Street Bridge, based upon previous 10 years of record.

Shall not exceed 150 micromhos/cm (90 percentile) in

well-mixed waters of the Feather River.

Shall not exceed 150 micromhos/cm from Friant Dam to

Gravelly Ford (90 percentile).

Shall not exceed 125 mg/l (90 percentile)

APPLICABLE WATER BODIES

Sacramento River (13, 30)

Dam at Oroville to Sacramento River (40)
San Joaquin River, Friant Dam to Mendota

North Fork of the Feather River (33):

Middle Fork of the Feather River from Little Last Chance Creek to Lake Oroville (36); Feather River from the Fish Barrier

Pool (69)

North Fork of the American River from the source to Folsom Lake (44); Middle Fork

of the American River from the source to Folsom Lake (45); South Fork of the American River from the source to Folsom Lake (48, 49); American River from Folsom Dam to Sacramento River (51)

Shall not exceed 100 mg/l (90 percentile) Folsom Lake (50)

Shall not exceed 1,300,000 tons Goose Lake (2)

TABLE III-4 SPECIFIC TEMPERATURE OBJECTIVES

DATES

From 1 December to 15 March, the maximum temperature shall be 55°F.

From 16 March to 15 April, the maximum temperature shall be 60°F.

From 16 April to 15 May, the maximum temperature shall be 65°F.

From 16 May to 15 October, the maximum temperature shall be 70°F.

From 16 October to 15 November, the maximum temperature shall be 65°F.

From 16 November to 30 November, the maximum temperature shall be 60°F.

The temperature in the epilimnion shall be less than or equal to 75°F or mean daily

ambient air temperature, whichever is greater.

The temperature shall not be elevated above 56°F in the reach from Keswick Dam to Hamilton City nor above 68°F in the reach from Hamilton City to the I Street Bridge during periods when temperature increases will be detrimental to the fishery.

APPLICABLE WATER BODY

Sacramento River from its source to Box Canyon Reservoir (9); Sacramento River from Box Canyon Dam to Shasta Lake

(11)

Lake Siskiyou (10)

Sacramento River from Shasta Dam to

I Street Bridge (13, 30)

Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:

- Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases shall not exceed 1 NTU.
- Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.
- Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
- Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.

Exceptions to the above limits will be considered when a dredging operation can cause an increase in turbidity. In those cases, an allowable zone of dilution within which turbidity in excess of the limits may be tolerated will be defined for the operation and prescribed in a discharge permit.

For Folsom Lake (50) and American River (Folsom Dam to Sacramento River) (51), except for periods of storm runoff, the turbidity shall be less than or equal 10 NTUs. To the extent of any conflict with the general turbidity objective, the more stringent applies.

For Delta waters, the general objectives for turbidity apply subject to the following: except for periods of storm runoff, the turbidity of Delta waters shall not exceed 50 NTUs in the waters of the Central Delta and 150 NTUs in other Delta waters. Exceptions to the Delta specific objectives will be considered when a dredging operation can cause an increase in turbidity. In this case, an allowable zone of dilution within which turbidity in excess of limits can be tolerated will be defined for the operation and prescribed in a discharge permit.

CHARTS AND TABLES FROM THE WATER QUALITY CONTROL PLAN FOR THE TULARE LAKE BASIN

TABLE III-1 TULARE LAKE BASIN SPECIFIC DISSOLVED OXYGEN WATER QUALITY OBJECTIVES

Stream	Location	Min DO (mg/l)
<u> Manual</u>	200 Million	Min DO Migrit
Kings River		
Reach I	Above Kirch Flat	9
Reach II	Kirch Flat to Pine Flat Dam	9
Reach III	Pine Flat Dam to Friant-Kern	9
Reach IV	Friant-Kern to Peoples Weir	7
Reach V	Peoples Weir to Island Weir	7
Kaweah River	Lake Kaweah	7
Tule River	Lake Success	7
Kern River		
Reach I	Above Lake Isabella	8
Reach III	Lake Isabella to Southern California Edison Powerhouse (KR-1)	8

TABLE III-2 TULARE LAKE BASIN MAXIMUM ELECTRICAL CONDUCTIVITY LEVELS

Stream	Location	Max. Electrical Conductivity (umho/cm)
Kings River		
Reach I	Above Kirch Flat	100
Reach II	Kirch Flat to Pine Flat Dam	100 °
Reach III	Pine Flat Dam to Friant-Kern	100
Reach IV	Friant-Kern to Peoples Weir	200
Reach V	Peoples Weir to Island Weir	300 b
Reach VI	Island Weir to Stinson Weir on North Fork	
	and Empire Weir No. 2 on South Fork	300 b
Kaweah River	11 1 -1 - V 1	
Reach I	Above Lake Kaweah	175
Reach II	Lake Kaweah	175 °
Reach III	Below Lake Kaweah	-
Tule River		
Reach I	Above Lake Success	450
Reach II	Lake Success	450°
Reach III	Below Lake Success	d
Kern River		
Reach I	Above Lake Isabella	200
Reach II	Lake Isabella	300
Reach III	Lake Isabella to Southern California Edison Powerhouse	
	(KR-1)	300
Reach IV	KR-1 to Bakersfield	300 1
Reach V	Below Bakersfield	d

- Maximum 10-year average 50 µmhos
- During the period of irrigation deliveries. Providing, further, that for 10 percent of the time (period of low flow) the following shall apply to the following reaches of the Kings River:

Reach V 400 µmhos Reach VI 600 µmhos

- Maximum 10-year average 100 µmhos
- During the irrigation season releases should meet the levels shown in the preceding reach. At other times the channel will be dry or controlled by storm flows.
- Maximum 10-year average 250 µmhos
- Maximum 10-year average 175 µmhos

TABLE III-3 TULARE LAKE BASIN ELECTRICAL CONDUCTIVITY OBJECTIVES AT SELECTED STREAMFLOW STATIONS

flow		Electrical Cond	uctivity (µn	nhos/cm)
umber	Location	90-Percentile	Median	Mean
DWR				
201140.00	Kings River below Peoples Weir	198	81	102
211460.00	Kings River below North Fork	68	48	47
211140.00	Kings River below Pine Flat Dam	54	36	42
21250.00	Kaweah River near Three Rivers	154	95	94
31150.00	Tule River near Springville	429	278	367
003195.00	Tule River below Success Dam 368		244	235
351500.00	Kern River at Kernville	177	116	118
25135.00	Kern River below Isabella Dam	278	141	165
005150.00	Kern River near Bakersfield	233	158	167
	flow umber DWR 201140.00 211460.00 211250.00 231150.00 231500.00 251500.00 25135.00 205150.00	Location DWR 201140.00 Kings River below Peoples Weir 211460.00 Kings River below North Fork 211140.00 Kings River below Pine Flat Dam 221250.00 Kaweah River near Three Rivers 231150.00 Tule River near Springville 203195.00 Tule River below Success Dam 251500.00 Kern River at Kernville 25135.00 Kern River below Isabella Dam	Location 90-Percentile DWR 201140.00 Kings River below Peoples Weir 198 C11460.00 Kings River below North Fork 68 C11140.00 Kings River below Pine Flat Dam 54 C21250.00 Kaweah River near Three Rivers 154 C31150.00 Tule River near Springville 429 C03195.00 Tule River below Success Dam 368 C51500.00 Kern River at Kernville 177 C5135.00 Kern River below Isabella Dam 278	Location 90-Percentile Median DWR 201140.00 Kings River below Peoples Weir 198 81 C11460.00 Kings River below North Fork 68 48 C11140.00 Kings River below Pine Flat Dam 54 36 C21250.00 Kaweah River near Three Rivers 154 95 C31150.00 Tule River near Springville 429 278 C03195.00 Tule River below Success Dam 368 244 C51500.00 Kern River at Kernville 177 116 C5135.00 Kern River below Isabella Dam 278 141

TABLE III-4 TULARE LAKE BASIN GROUND WATER QUALITY OBJECTIVES FOR SALINITY

Hydrographic Unit	Maximum Average Annual Increase in Electrical Conductivity (umhos/cm)	
Westside (North and South)	1	
Kings River	4	
Tulare Lake and Kaweah River	3	
Tule River and Poso	6	
Kern River	5	

WATER QUALITY L FRESHWATER AQUATIC LIFE - OXYGEN, DISSOLVED

USEPA National Recommended Water Quality Criteria to Protect Freshwater Aquatic Life Dissolved Oxygen (mg/L) Coldwater Criteria Warmwater Criteria

Coldwater Criteria				
Early Stages	Other Life			
Water Column	Intergravel	Stages		
Not Applicable	Not Applicable	6.5		
9.5	6.5	Not Applicable		
Not Applicable	Not Applicable	5.0		
0.0	F 0	0.0		

Warmwater Criteria		
Early Life Stages (b)	Other Life Stages	
Not Applicable	5.5	
6.0	Not Applicable	
Not Applicable	4.0	
5.0	3.0	

7-Day Mean Minimum 1-Day Minimum (c)

30-Day Mean 7-Day Mean

> Notes: (a)

⁽b) Includes all embryonic and larval stages and all juvenile forms to 30-days following hatching.

⁽c) For reservoire or other manipulable discharges, the application of the one day minimum criterion must limit either the frequency of occurrence of values below the acceptable 7-day mean minimum or must impose further limits on the extent of excursions below the 7-day mean minimum. For such controlled discharges, it is recommended that the occurrence of the daily minima below the acceptable 7-day mean minimum be limited to 3 weeks per

WATER QUALITY LIMITS FOR CONSTITUENTS AND PARAMETERS FRESHWATER AQUATIC LIFE - AMMONIA

	USEPA National Recommended Water Quality Criteria to Protect Freshwater Aquatic Life Total Ammonia Nitrogen																						
	Continuous Concentration													i I									
	Fish Early Life Stages Present					Fish Early Life Stages Absent						1-hour Average (mg N/L)		1									
				Temp	erature	e, degr	ees C					Temperature, degrees C							Salmonids	Salmonids	1		
рН	0	14	16	18	20	22	24	26	28	30	0 - 7	8	9	10	11	12	13	14	15 †	16 †	Present	Absent	рН
6.5	6.67	6.67	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46	6.06	32.6	48.8	6.5
6.6	6.57	6.57	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36	5.97	31.3	46.8	6.6
6.7	6.44	6.44	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25	5.86	29.8	44.6	6.7
6.8	6.29	6.29	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10	5.72	28.0	42.0	6.8
6.9	6.12	6.12	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93	5.56	26.2	39.2	6.9
7.0	5.91	5.91	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73	5.37	24.1	36.1	7.0
7.1	5.67	5.67	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49	5.15	21.9	32.9	7.1
7.2	5.39	5.39	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22	4.90	19.7	29.5	7.2
7.3	5.08	5.08	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92	4.61	17.5	26.2	7.3
7.4	4.73	4.73	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59	4.30	15.3	23.0	7.4
7.5	4.36	4.36	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23	3.97	13.3	19.9	7.5
7.6	3.98	3.98	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85	3.61	11.4	17.0	7.6
7.7	3.58	3.58	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47	3.25	9.64	14.4	7.7
7.8	3.18	3.18	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	8.11	12.1	7.8
7.9	2.80	2.80	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71	2.54	6.77	10.1	7.9
8.0	2.43	2.43	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36	2.21	5.62	8.41	8.0
8.1	2.10	2.10	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03	1.91	4.64	6.95	8.1
8.2	1.79	1.79	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74	1.63	3.83	5.73	8.2
8.3	1.52	1.52	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48	1.39	3.15	4.71	8.3
8.4	1.29	1.29	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25	1.17	2.59	3.88	8.4
8.5	1.09	1.09	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06	0.990	2.14	3.20	8.5
8.6	0.920	0.920	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892	0.836	1.77	2.65	8.6
8.7	0.778	0.778	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754	0.707	1.47	2.20	8.7
8.8	0.661	0.661	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244	1.07	1.01	0.944	0.885	0.829	0.778	0.729	0.684	0.641	0.601	1.23	1.84	8.8
8.9	0.565	0.565	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548	0.513	1.04	1.56	8.9
9.0	0.486	0.486	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471	0.442	0.885	1.32	9.0

Notes:

- † At 15 C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present.
- ‡ In addition, the highest four-day average within the 30-day period should not exceed 2.5 times the Criteria Continuous Concentration shown in the above table.

<u>Criteria Continuous Concentration</u> 30-day average total ammonia nitrogen (in mg N/L) ‡

when fish early life stages are present:

$$CCC = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) \times MIN\left(2.85,1.45 \times 10^{0.028 \times (25-T)}\right)$$

when fish early life stages are absent:

$$CCC = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) \times 1.45 \times 10^{0.028 \times (25-MAX (T.7))}$$

where T = temperature in degrees C

<u>Criteria Maximum Concentration</u> 1-hour average total ammonia nitrogen (in mg N/L)

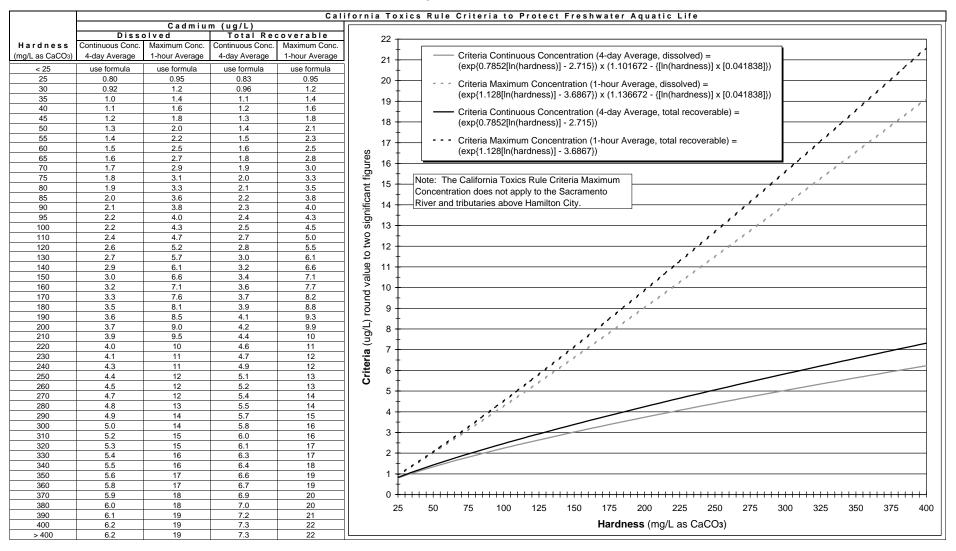
where salmonid fish are present:

$$CMC = \frac{0.275}{1+10^{7.204-pH}} + \frac{39.0}{1+10^{pH-7.204}}$$

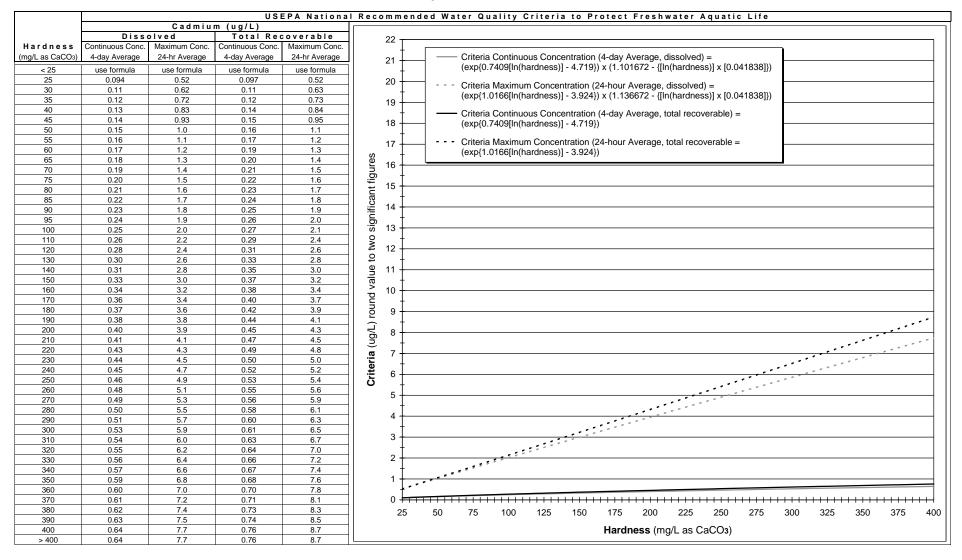
where salmonid fish are not present:

CMC =
$$\frac{0.411}{1+10^{7.204-pH}} + \frac{58.4}{1+10^{pH-7.204}}$$

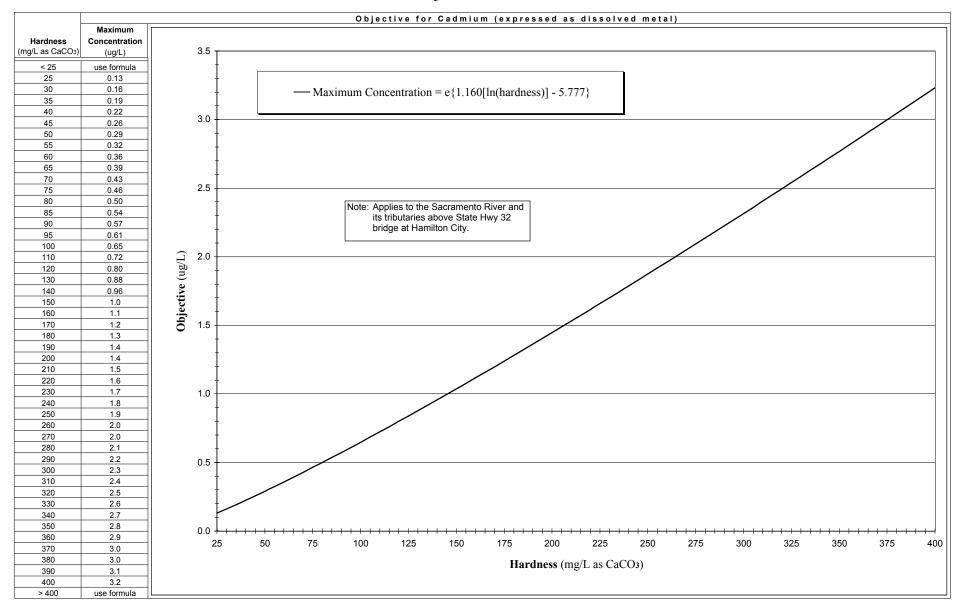
FRESHWATER AQUATIC LIFE - CADMIUM



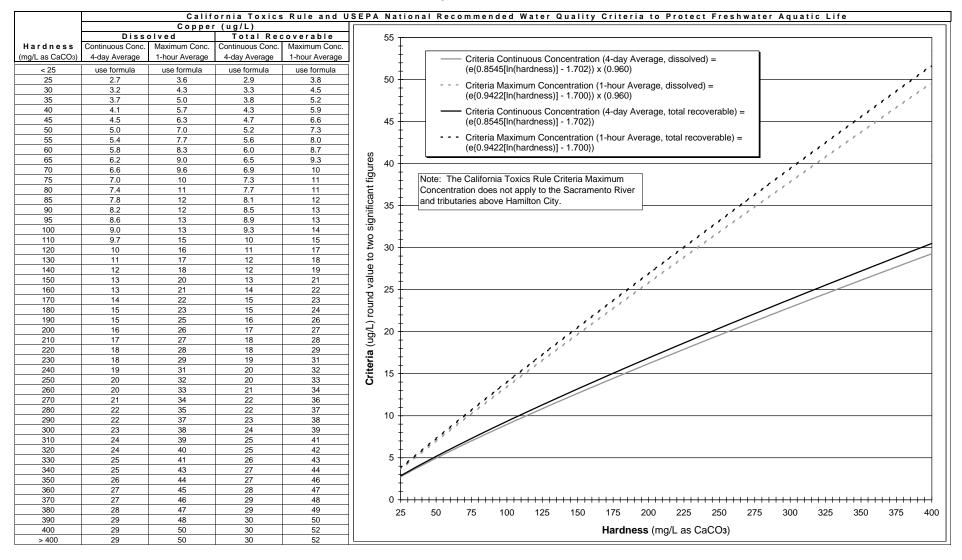
WATER QUALITY LIMITS FOR CONSTITUENTS AND PARAMETERS FRESHWATER AQUATIC LIFE - CADMIUM



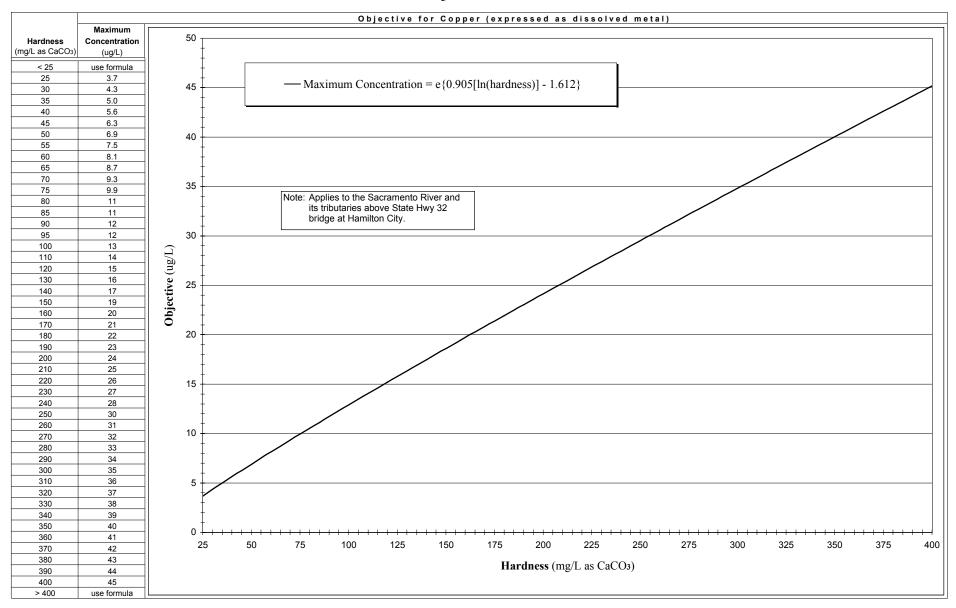
WATER QUALITY CONTROL PLAN FOR THE SACRAMETNO RIVER AND SAN JOAQUIN RIVER BASINS, 4TH EDITION (1998) TRACE ELEMENT WATER QUALITY OBJECTIVES - CADMIUM



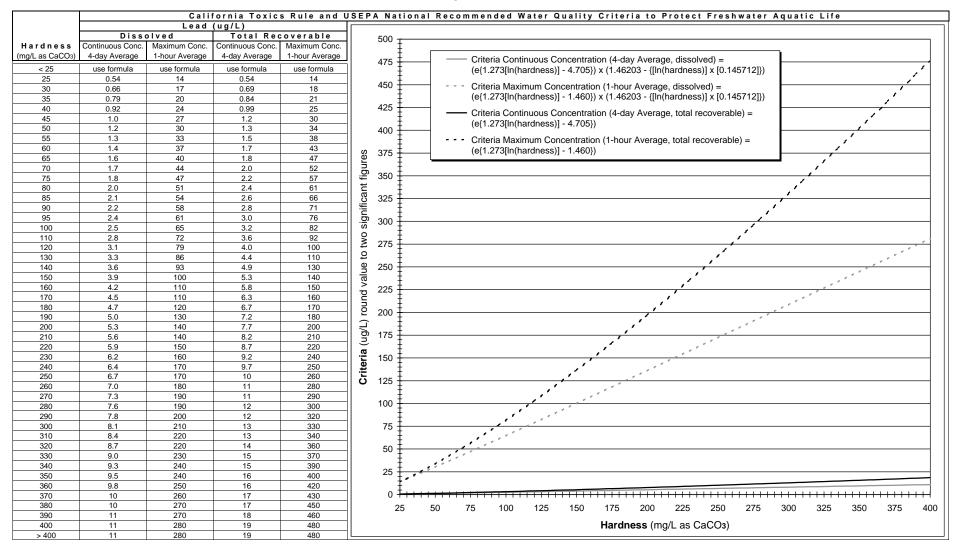
WATER QUALITY LIMITS FOR CONSTITUENTS AND PARAMETERS FRESHWATER AQUATIC LIFE - COPPER



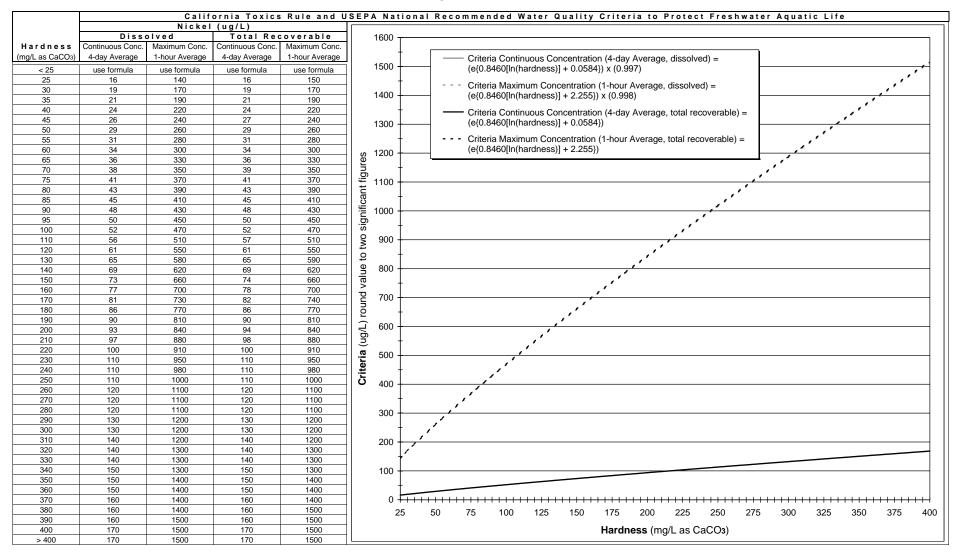
WATER QUALITY CONTROL PLAN FOR THE SACRAMETNO RIVER AND SAN JOAQUIN RIVER BASINS, 4TH EDITION (1998) TRACE ELEMENT WATER QUALITY OBJECTIVES - COPPER



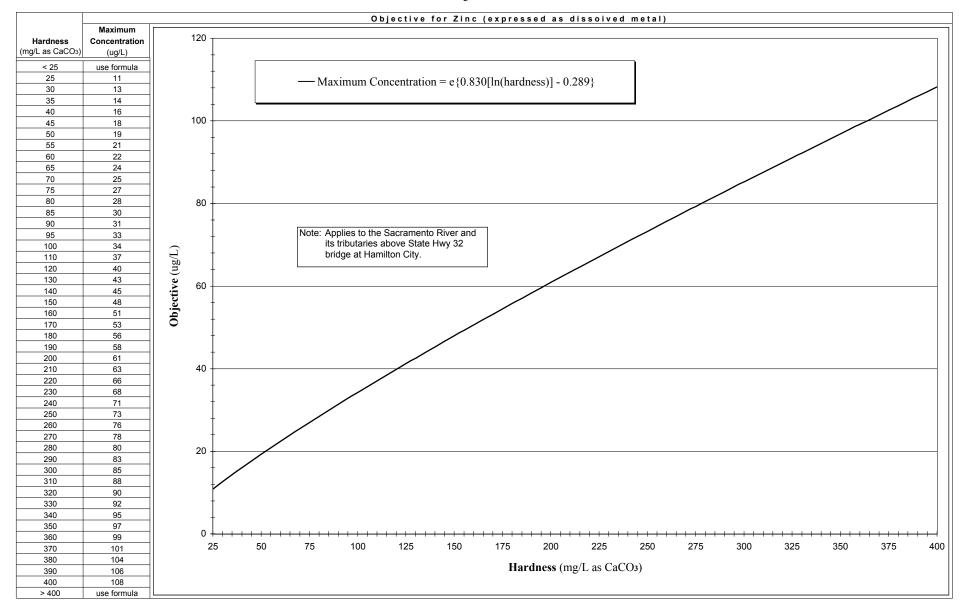
FRESHWATER AQUATIC LIFE - LEAD



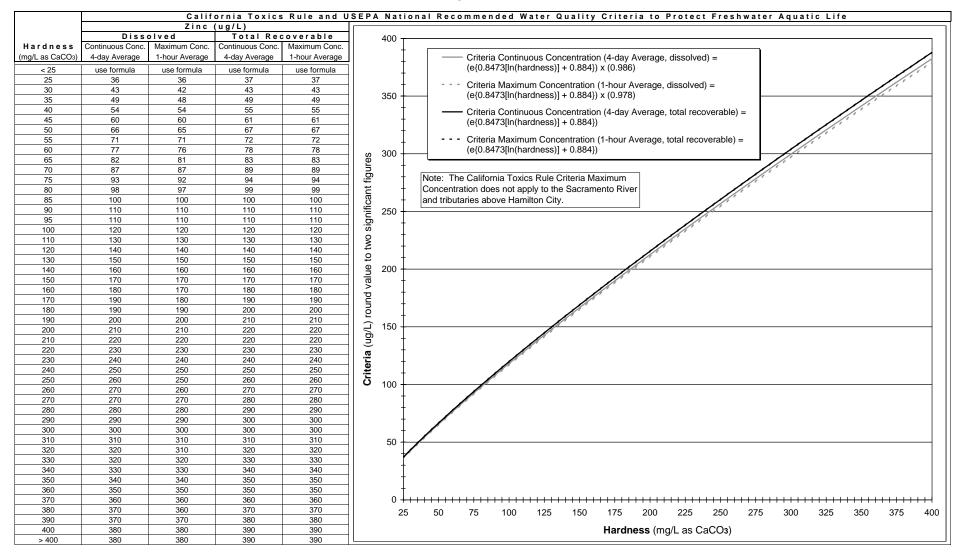
WATER QUALITY LIMITS FOR CONSTITUENTS AND PARAMETERS FRESHWATER AQUATIC LIFE - NICKEL



WATER QUALITY CONTROL PLAN FOR THE SACRAMETNO RIVER AND SAN JOAQUIN RIVER BASINS, 4TH EDITION (1998) TRACE ELEMENT WATER QUALITY OBJECTIVES - ZINC



WATER QUALITY LIMITS FOR CONSTITUENTS AND PARAMETERS FRESHWATER AQUATIC LIFE - ZINC



TENTATIVE ATTACHMENT B

ORDER NO. R5-2005-___ COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

PURSUANT TO CALIFORNIA WATER CODE SECTION 13269

Attachment B to Order No. R5-2005-____ constitutes a *Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands* (Coalition Group Conditional Waiver). The Coalition Group Conditional Waiver conditionally waives waste discharge requirements (WDRs) and reports of waste discharge for discharges from irrigated lands to surface waters within the Central Valley Region. The Coalition Group Conditional Waiver establishes conditions with which Coalition Groups must comply to obtain coverage under and to be considered in compliance with the Coalition Group Conditional Waiver. Order No. R5-2005-____ defines "discharges from irrigated lands" as including surface discharges (also known as irrigation return flows or tailwater), operational spills, subsurface discharges through drainage systems that lower the water table below irrigated lands (also known as tile drains), and stormwater runoff flowing from irrigated lands.

The Coalition Groups shall comply with the following conditions:

A. General

- The Coalition Group shall comply with all conditions of the Coalition Group Conditional Waiver, including timely submittal of all technical reports specified in **Part B. Technical Reports**.
 Violations may result in enforcement action under the California Water Code (Water Code), including Central Valley Water Board orders or termination of coverage under the Coalition Group Conditional Waiver.
- 2. The reports submitted to comply with the Coalition Group Conditional Waiver shall be signed by a representative authorized by the Coalition Group.
- 3. Any person signing a report submitted as required by the Coalition Group Conditional Waiver makes the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for violations."
- 4. Coalition Groups shall comply with Coalition Group Monitoring and Reporting Program (MRP) Order No. R5-2005-____, which is required by the Coalition Group Conditional Waiver, or as revised by the Executive Officer.

- 5. For the purposes of the Coalition Group Conditional Waiver, an "exceedance" is a reading using a field instrument or a detection by a California State-certified analytical laboratory where the detected result is above the receiving water limitation for the parameter or constituent. Receiving water limitations implement the appropriate Basin Plan's numeric and narrative water quality objectives. An exceedance also is a California State-certified laboratory analytical result reported as non-detect when the reporting limit is higher than the receiving water limitation for the parameter or constituent. A table listing receiving water limitations, which may be revised periodically, is provided in **Attachment A**. For toxicity tests, an exceedance is a result that is statistically different from the control sample test result.
- 6. Dischargers who are members of a Coalition Group shall enroll in the Irrigated Lands Conditional Waiver Program either electronically or by providing the appropriate documentation in writing pursuant to the schedule in B.3 Technical Reports. Enrollment documentation shall contain necessary member information pursuant to B.4 Technical Reports to be deemed complete.
- 7. Dischargers who are members of a Coalition Group shall implement management practices to improve and protect water quality and to achieve compliance with applicable receiving water limitations identified in **Attachment A**.
- 8. Dischargers who are members of a Coalition Group shall not discharge any waste not specifically regulated by the Coalition Group Conditional Waiver, cause new discharges of wastes from irrigated lands that impair surface water quality, or increase discharges of waste or add new wastes that impair surface water quality not previously discharged by the Discharger. Waste specifically regulated by the Coalition Group Conditional Waiver includes earthen materials, such as soil, silt, sand, clay, and rock; inorganic materials, such as metals, salts, boron, selenium, potassium, nitrogen, etc.; and organic materials, such as organic pesticides, that enter or threaten to enter into waters of the State. Examples of waste not regulated by the Coalition Group Conditional Waiver include hazardous waste and human waste.
- 9. The Central Valley Water Board staff may investigate the property of persons subject to the Coalition Group Conditional Waiver pursuant to Water Code Section 13267(c) to ascertain whether the purposes of the Porter-Cologne Water Quality Control Act are being met and whether the conditions of the Coalition Group Conditional Waiver are being complied with. The inspection shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in Title 13 Code of Civil Procedure Part 3 (commencing with Section 1822.50). In the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant.
- 10. The Coalition Group and/or its member Dischargers shall take all reasonable steps to prevent any discharge in violation of the Coalition Group Conditional Waiver.
- 11. The Coalition Group and/or its member Dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system, including management practices

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and monitoring devices installed or used to achieve compliance with the Coalition Group Conditional Waiver.

12. The discharge of any waste not specifically regulated by the Coalition Group Conditional Waiver described herein is prohibited unless the Discharger complies with Water Code Section 13260(a) and the Central Valley Water Board either issues WDRs pursuant to Water Code Section 13263 or an individual waiver pursuant to Water Code Section 13269 or the time frames specified in Water Code Section 13264(a) have elapsed.

B. Technical Reports

- 1. A Coalition Group may submit a completed Notice of Intent (NOI) on behalf of its member Dischargers, who are seeking to discharge under the Coalition Group Conditional Waiver. The NOI form is included at the end of this Attachment B.
 - a. The NOI shall contain all of the requested information in a format approved by the Executive Officer.
 - b. The NOI shall identify the representative authorized to sign reports submitted on behalf of the Coalition Group.
 - c. The Coalition Group shall maintain a list of participants who have knowingly elected to be a member of the Coalition Group. The list shall include, at a minimum, information on how to contact each member, including address and phone number, and information sufficient to locate each member's fields or all parcels that are within a Coalition Group boundary. The Central Valley Water Board may further specify the information to be included. The list of members shall be provided in hard copy and electronic form to the Central Valley Water Board upon request, within the time specified by the Central Valley Water Board, which time shall not exceed 30 days.
 - d. The NOI shall identify the lead agencies and/or organizations that will develop the Coalition Group's program, the key contact(s), and a description of the Coalition Group's geographical area.
 - e. The NOI shall provide a detailed map of the area included within the Coalition Group boundaries that shall identify Coalition Group member landowners, operators, and/or Water Districts, which discharge or threaten to discharge waste from irrigated lands to waters of the State and are to be covered by the Coalition Group Conditional Waiver.
 - The NOI shall identify the funding mechanism(s) that will support the Coalition Group administrative costs, water quality monitoring, management practice evaluation and development, and other costs necessary to ensure compliance with the Coalition Group Conditional Waiver.

2. Upon submittal of a complete NOI and approval of the NOI, the Executive Officer may issue a Notice of Applicability (NOA) to extend coverage to the Coalition Group under the Coalition Group Conditional Waiver.

3. Each participant who has knowingly elected to be a member of the Coalition Group shall enroll directly with the Central Valley Water Boards Irrigated Lands Conditional Waiver Program pursuant to the following schedule. Enrollment shall be completed electronically or in writing.

Operations(s) and Parcel(s) Size	Enrollment Deadline	
≥ 500 Irrigated Acres, Water Districts	1 January 2007	
≥ 240 and < 500 Irrigated Acres	1 April 2007	
≥ 120 and < 240 Irrigated Acres, Nurseries	1 July 2007	11
> 40 Acres and < 120 Irrigated Acres	1 October 2007	11
40 Acres and Less, Managed Wetlands	1 January 2008	

4. To complete the enrollment with the Central Valley Water Board, each member shall provide, at a minimum, information on how to contact each member, including address and phone number, and information sufficient to locate each member's fields or all parcels, the size of the field(s) and/or parcels, whether they are an owner and/or the operator.

5. Members of a Coalition Group are required to develop and maintain on-site (contact address if not at the operation) at all times a completed Farm Water Quality Plan (FWQ Plan) for their entire operation pursuant to the following schedule. The FWQ Plan shall identify, at a minimum, appropriate management practices for: irrigation management, nutrient management, pesticide management, and erosion control.

Management practices must be designed and implemented to achieve improvements in water quality and compliance with the conditions in the Conditional Waiver and the State and Central Valley Water Board plans and polices. Where appropriate, the FWQ Plan must identify future actions necessary to improve and protect water quality. The FWQ Plan shall be made available to Central Valley Regional Board staff, Department of Pesticides Regulation staff, and/or Agricultural Commissioner staff upon request.

Specific Members required to have FWQ Plan	Deadline for FWQ Plan On-site	
Operations ≥ 500 Irrigated Acres	1 January 2007	
Operations \geq 240 and $<$ 500 Irrigated Acres	1 January 2008	$\boldsymbol{\rho}$
Operations ≥ 40 and < 240 Irrigated Acres	1 January 2009	
Other Operations	As Directed by the Executive Officer	

6. Each Coalition Group that receives a NOA shall submit and implement a MRP Plan as specified in Coalition Groups MRP Order No. R5-2005-_____, which is required by the Coalition Group Conditional Waiver, or as revised by the Executive Officer. The purposes of the MRP Plan include, but are not limited to, the following: 1) to determine whether the discharge of waste from irrigated lands within the Coalition Group boundaries causes or contributes to exceedances of receiving water limitations or causes nuisance; 2) to provide information about the Coalition

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Group area characteristics, including but not limited to, land use, crops grown, chemicals used, etc.; 3) to monitor the effectiveness of management practices implemented following exceedances of receiving water limitations; and 4) to specify details about monitoring periods, parameters, protocols, and quality assurance.

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7. Each Coalition Group that receives a NOA shall submit technical reports as specified in Coalition Groups MRP Order No. R5-2005-____, which is required by the Coalition Group Conditional Waiver, or as revised by the Executive Officer.

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8. If the Coalition Group wishes to terminate coverage under the Coalition Group Conditional Waiver, the Coalition Group shall submit a complete Notice of Termination (NOT). The NOT form is included at the end of this Attachment B. Termination from coverage will occur on the date specified in the NOT, unless specified otherwise. All discharges shall cease before the date of termination, and any discharges on or after this date shall be considered in violation of the Coalition Group Conditional Waiver, unless other Waivers of WDRs, General WDRs, or individual WDRs cover the discharge.

9. Upon a determination by either the Coalition Group or its member Dischargers that a discharge is causing or contributing to an exceedance of a receiving water limitation listed in Attachment A of the Order, the Coalition Group shall promptly notify the Central Valley Water Board in writing. Based on this information or other information available to the Central Valley Water Board, the Coalition Group shall, upon written notice by the Central Valley Water Board Executive Officer, submit a technical report called a Management Plan to the Central Valley Water Board as follows:

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a. The Management Plan shall evaluate the effectiveness of existing management practices in achieving receiving water limitations and identify additional actions, including different or additional management practice implementation or education outreach, etc., the Coalition Group proposes to implement to achieve water quality objectives.

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b. The Management Plan shall include a waste specific monitoring plan and an implementation schedule to address the exceedance.

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c. The Coalition Group and/or its member Dischargers shall submit any modifications to the Management Plan required by the Central Valley Water Board and address the Central Valley Water Board's comments within 30 days of written notification, unless otherwise directed by the Executive Officer.

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- d. The Coalition Group and/or its member Dischargers shall make the Management Plan available to the public upon written request. The Central Valley Water Board may provide the public an opportunity to review and comment on submitted Management Plans.
- 10. All materials submitted pursuant to the Coalition Group Conditional Waiver shall be available for public inspection at the Central Valley Water Board offices, except for reports, or portions of such reports, subject to an exemption from public disclosure in accordance with California law

TENTATIVE ATTACHMENT B
ORDER NO. R5-2005-___
COALITION GROUP CONDITIONAL WAIVER OF
WASTE DISCHARGE REQUIREMENTS
FOR DISCHARGES FROM IRRIGATED LANDS

and regulations, including trade secrets and secret processes under Water Code Section 13267(b)(2), and the Public Records Act. NOIs shall generally not be considered confidential. If the Discharger asserts that all or a portion of a report is subject to an exemption from public disclosure, the Discharger must clearly indicate on the cover of the Report that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately-bound unredacted pages (to be maintained separately by staff), and provide an explanation of how those portions of the reports are exempt from public disclosure. The Central Valley Water Board staff shall determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Valley Water Board staff disagrees with the asserted exemption from public disclosure, the Central Valley Water Board staff shall notify the Discharger prior to making such report or portions of such report available for public inspection.

11. All technical reports submitted pursuant to the Coalition Group Conditional Waiver are required pursuant to Water Code Section 13267. Failure to submit technical reports in accordance with schedules established by the Coalition Group Conditional Waiver and/or the attachments to the Coalition Group Conditional Waiver, or failure to submit a complete technical report (e.g., of sufficient technical quality to be acceptable to the Executive Officer), may subject the Discharger to enforcement action pursuant to Water Code Section 13268.

C. Receiving Water Limitations

- 1. Receiving water limitations are based upon water quality objectives contained in Basin Plans. As such, the limitations provided in Attachment A of the Order and water quality objectives in the Basin Plans are a required part of the Coalition Group Conditional Waiver. In addition to the receiving water limitations listed in Table 1, Dischargers who are members of Coalition Groups shall not cause:
 - a. Deposition of material that causes nuisance or adversely affects beneficial uses.
 - b. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
 - c. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
 - d. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
 - e. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.

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Violation of any applicable water quality objective in the Central Valley Water Board's Basin Plans or any water quality standard for receiving waters adopted by the Central Valley Water Board or the State Water Board pursuant to the Clean Water Act and regulations adopted thereunder.

2. Coalition Groups and/or their member Dischargers shall comply with receiving water limitations. The Coalition Groups and/or their member Dischargers shall, through timely implementation of management practices, reduce wastes in the discharges in accordance with the conditions of the Coalition Group Conditional Waiver, including any modifications. Management practices shall be designed to improve and achieve compliance with receiving water limitations, to protect water quality, and prevent nuisance. If exceedance(s) of receiving water limitations persist notwithstanding implementation of management practices and other requirements of the Coalition Group Conditional Waiver, the Coalition Group shall submit a Management Plan as specified in Part B. Technical Reports of the Coalition Group Conditional Waiver.

D. Time Schedule

Pursuant to Water Code Section 13267, the following technical reports are required to be submitted to the Central Valley Water Board, as directed by the Executive Officer, as a condition of the Coalition Group Conditional Waiver.

<u>Task</u> MRP Plan	Compliance Date 30-150 days after filing of NOI	t
Wet Season Monitoring Report as required by the Coalition Group MRP Order No. R5-2005	30 June of each year	•
Irrigation Season Monitoring Report as required by the Coalition Group MRP Order No. R5-2005	31 December of each year	1
Management Plan	As required by the Executive Officer	\mathbf{V}

TENTATIVE ATTACHMENT B
ORDER NO. R5-2005-___
COALITION GROUP CONDITIONAL WAIVER OF
WASTE DISCHARGE REQUIREMENTS
FOR DISCHARGES FROM IRRIGATED LANDS

NOTICE OF INTENT TO COMPLY WITH

ORDER NO. R5-2005-XXXX
COALITION GROUP CONDITIONAL WAIVER OF
WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES FROM IRRIGATED LANDS

1. COALITION GROUP INFORMATION

Watershed:								
Coalition Group Representative:								
Mailing Address:								
City/Locale: County: State: Zip: Telephone Number:								

The Coalition Group representative's information shall be included in the above information box. Along with this Notice of Intent, the Coalition Group shall:

- Maintain a list of participants who have knowingly elected to be a member of the Coalition Group. The list shall include, at a minimum, information on how to contact each member, including address and phone number, and information sufficient to locate each member's fields or parcels that are within a Coalition Group boundary,
- Identify the representative authorized to sign reports submitted on behalf of the Coalition Group,
- Identify the lead agencies and/or organizations that will develop a watershed or sub-watershed program, the key contact(s), a description of the watershed, and a commitment to work with the Central Valley Water Board to satisfy the conditions of the Coalition Group Conditional Waiver,
- Provide a detailed map of the area included within the Coalition Group that shall identify
 participating landowners and/or operators and Districts (member Dischargers) which discharge
 or threaten to discharge waste from irrigated lands to waters of the State and are to be covered
 under the conditions of the Coalition Group Conditional Waiver, and
- Identify the funding mechanisms that will support the Coalition Group administrative costs, water quality monitoring, management practice evaluation and development, and other costs necessary to ensure compliance with the Coalition Group Conditional Waiver.

The Central Valley Water Board may further specify the information to be included. This information shall be provided to the Central Valley Water Board upon request, within the time specified by the Central Valley Water Board, which time shall not exceed thirty days. 2. REASON(S) FOR FILING ☐ New Discharge or Coalition Group ☐ Changes in Ownership/Operator or addition of Discharger(s) to Coalition Group ☐ Existing Coalition Group ☐ Change of Coalition Group boundary Other: 3. ADDITIONAL INFORMATION Please attach the following information to this NOI: A site map, which shows the geographic boundaries of the Coalition Group and identifies the surface watercourses within these boundaries. 2. Use the space below, or attach additional sheets, to explain any response that needs clarification.

4. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, complete, and that those individual Dischargers listed in the Member Document have elected to join the Coalition Group. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name:	Title:
Signature:	Date:

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TENTATIVE ATTACHMENT B
ORDER NO. R5-2005-___
COALITION GROUP CONDITIONAL WAIVER OF
WASTE DISCHARGE REQUIREMENTS
FOR DISCHARGES FROM IRRIGATED LANDS

	NOTICE (TO C	OF TER		N					
ORDER NO. R5-2005 COALITION GROUP CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR									
DISCHARGES FROM IRRIGATED LANDS									
This document is only to be used for Coalition Groups that have been issued a Notice of Applicability (NOA) by the Executive Officer. Submission of this Notice of Termination constitutes official notification to the Central Valley Water Board that the Coalition Group identified below elects not be covered under Order No. R5-2005, Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from									
Irrigated Lands. 1. COALITION GROUP IN	IFORMATION ¹				11				
Watershed:					1				
Coalition Group Representat	ive:				l				
Mailing Address:									
City/Locale:	City/Locale: County: State: Zip: Telephone Number:								
Document shall be included Discharger including the ow downstream surface water to	d with this NOT. This men ner/operator, farm assess body. A farm includes land, commercial nurseries, nu	nbership de or parcel n ds where w	ocument shall umber(s), Sec rater is applied	e information box. A Membership provide information for each individual ction, Township and Range and closest d for the purpose of producing crops and managed wetlands and rice production.	t				
Assessor's Parcel #:	Close	est Surface	e Water: (e.g.	Sacramento River)	1				
Township/Range/Section:			. 3	,					
TRB&M									
3. REASON FOR TERMIN	IATION				Δ				
Coalition Group no long under the Coalition Group Waiver			Other: Provide	Comments	C				

4. CERTIFICATION

I certify under penalty of law that (1) I am not required to be covered under the Coalition Group Conditional Waiver of Waste Discharge Requirements For Discharges From Irrigated Lands, and (2) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I also understand that submittal of this Notice of Termination does not release a facility from liability for any violations of the Coalition Group Conditional Waiver.

Print Name:	Title:		
Signature:	Date:		

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